

JOURNAL OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS

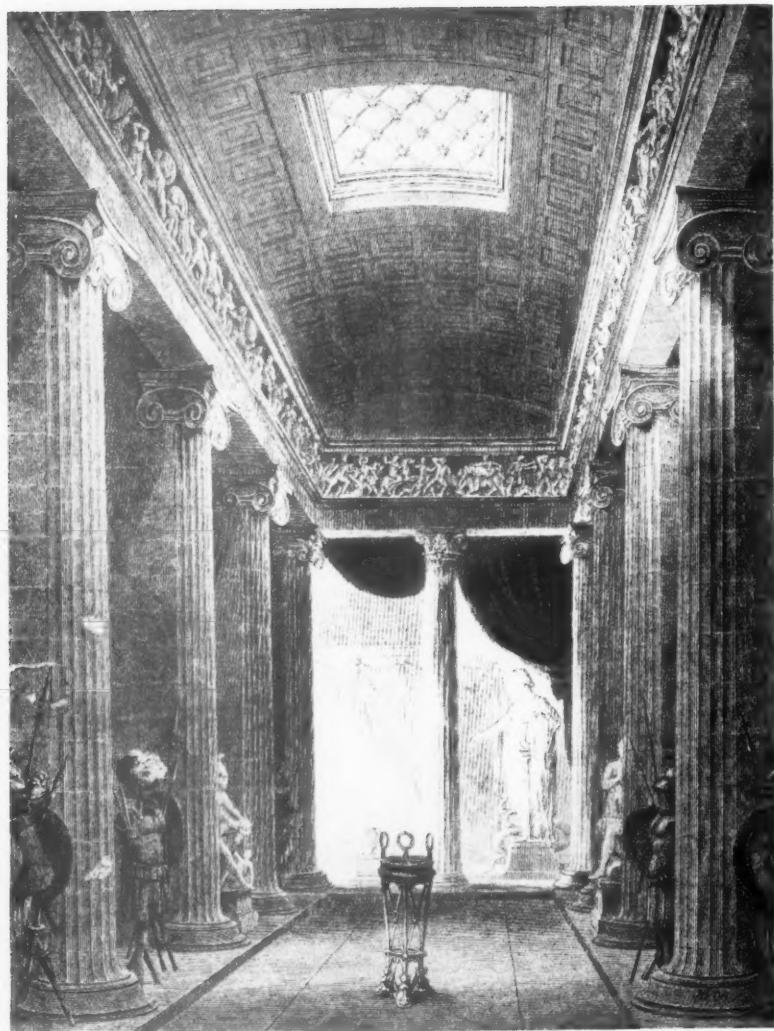
THIRD SERIES

VOL. 39. No. 9

5 MARCH 1932

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TEMPLE OF APOLLO AT BASSÆ  
Interior view, after C. R. Cockerell

# JOURNAL OF THE ROYAL INSTITUTE *of* BRITISH ARCHITECTS

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## Journal

In the last number of the JOURNAL a reference was made to what was called "the vexed subject of propaganda." It is not one which has been left unconsidered by the Institute Committees, and those whose particular business it is to promote officially the ideals of the profession and to keep the eye and mind of the general public open to the advantages to be gained from the use of properly qualified architects. Many more efforts are continually being made by the R.I.B.A. to educate the public in the right appreciation of architecture and to stimulate a vital architectural enthusiasm than most probably is realised by the majority of the profession.

Nine out of ten people depend on the ordinary daily press for their knowledge of architecture, and if we can ensure that architecture gets the "fair chance" in every paper that it gets in a few much will be done to increase not only knowledge, which may lead nowhere, but faith and enthusiasm. Faith is the poetical and dynamic side of conviction, which itself can only grow out of knowledge—such knowledge as we wish to encourage. This is as true of faith within the profession as without. While the profession itself is at loggerheads over a multitude of creeds, we can expect little real faith among the general public. Yet, maybe, the present hard times will prove a sojourn in the wilderness—an asceticism, to prelude the flowering of a new architectural faith that really will remove slums and really will give a renewed vitality and inspiration to every side of architecture. There are signs which give good reason for hope.

The powers of the general newspapers to assist are so enormous that we can never with wisdom leave the opportunities they offer unheeded. The cumulative effect of the generous reports which the provincial press gives to the meetings of the Allied Societies adds a hundredfold to

the direct value of such meetings, which otherwise is limited to those few who can actually attend. The rather meagre reports of Allied Societies' activities which, to our regret, is all we can give in this JOURNAL, have, as often as not, to be "boiled-down" from three, four or five column reports in local papers. Such reports seldom come unasked, and generally there will be found in the background some energetic and able secretary who first, perhaps, had to work hard to get reports at all but who now has the satisfaction of knowing that every meeting he arranges is "good copy."

There is another point. Almost every architect has been startled, or even perhaps amused if it is not his own building, at some amazing inaccuracy in reporting architectural facts. As one member has recently put it:—"A certain general knowledge of subjects like music, painting or chemistry, and the technical terms connected with them, is assumed to be part of the equipment both of journalist and reader; but there is apparently no one on the staff who can correct absurd errors as regards architecture. A certain daily paper, a couple of years ago, gave a picture of the Pantheon which it called 'The Parthenon'; and another really important London paper cheerfully printed a message from its Rome correspondent saying that the development of further cracks at the Vatican had been 'counteracted by the erection of scaffolding'! Yet they would be most alert about suppressing a statement sent from Luxor to the effect that Lord Reading's pulmonary affection had been reduced by taking his temperature.

"This is one point. Another, of course, is the old failure to mention the architect—now rather aggravated by the fact that the building is often quite fully described and



FIG. 2.—ANZIO MAIDEN IN THE THERMÆ MUSEUM, ROME

criticised and its author left unnamed. The very fact that such a thing would be unthinkable in the case of a picture, a book or a play shows a lack of intelligent outlook on this subject."

The chief comment that can be made on the first point is that reporters, unless specialists, are part of the general public and as such share the general ignorance of architecture. This can only be remedied by a slow process of education, led by architects themselves, which will make the demand for accurate information sufficiently large to encourage a supply, and ensure that all architectural reporting is done by persons with rudiments of architectural knowledge. The chief comment on the second point is that the architect is so incorrigibly modest that he does not take the trouble to make certain that the reporter with the notebook, jotting down names, gets *his* name down and gets it right. The reporter will certainly have the names of the Mayor and the notabilities and the contractor and will be only too pleased to have the architect's name, too. It is all more grist to his mill and most acceptable.

No one denies that the more the public knows of architecture and architects the better; the onus lies on the architect to see that the public interest is constantly stimulated and always well informed.

The following poem appeared on 17 February in *The Times* and we print it with permission.

#### BALLADE OF DEVASTATION

They're breaking down the bridge at Waterloo;  
They've daubed the house of Henry James at Rye;  
They've caught a man and put him in the Zoo;  
They've let the Japanese into Shanghai;  
They may destroy St. Peter's (on the sly):  
They all agree that dogma has to go;  
From pole to pole the shattered temples lie;  
They're cutting down the trees in Cheyne Row.  
Who are these Vandals, these accursed Hoo?  
Powers that destroy and spirits that deny?  
(You'll find their recreations in *Who's Who*).  
Those who would splash their liquors in the sky,  
And drench the stars in artificial dye;  
They wallow in the wide world's overthrow;  
They would uplift the ultimate blasphemy;  
They're cutting down the trees in Cheyne Row.  
Carlyle complained of Chelsea cows that moo,  
Where old world lavender is still the cry,  
Where Whistler's wizard dreams in green and blue  
Rest on the unresting river drifting by;  
"The King and Bells" is closing early . . . why?  
Where you and I . . . but that was long ago . . .  
They say that the whole world is going dry . . .  
They're cutting down the trees in Cheyne Row.

#### ENVOI

Prince, they've abolished God in Muscovy;  
You think that you are safe. That is not so.  
Much greater things than you are doomed to die:  
They're cutting down the trees in Cheyne Row.

GK MBC.



FIG. 3.—CONSERVATORI MUSEUM, ROME : HALL OF THE ESQUILINE VENUS

## SCULPTURE GALLERIES

THE ROYAL INSTITUTE OF BRITISH ARCHITECTS PRIZE ESSAY 1931

BY HOPE BAGENAL, A.R.I.B.A.

### 1. SCULPTURE IN THE VOID

SCULPTURE from the earliest times has always been something of a marvel. In the modern world a work of sculpture does not always tend easily and naturally to explain itself. More than other arts, it seems to require, for meaning's sake, an obvious relationship with its surroundings. But it is often very difficult to relate. Hence arise many artistic problems. Behind all the bad art connected with sculpture—behind the poor street monument, behind the ugly carved figures on a modern building, behind the desolate museum piece—there is the same cause, a failure in relationship.

A statue can convey intense personal emotion like music. But when it has conveyed its emotion it will not "stop" like music. It goes on occupying space and something must be done with it. The problem of what is to be done with this or that statue is a sufficiently familiar one. Therefore, although sculpture can do what music can do up to a point, it cannot do it as easily and as freely. It has not the gift of silence. For instance, to live with a representation of Bernini's *David* resembles artistically, after the lapse of a few days, the experience of the continual repetition of some striking operatic air upon a musical instrument.

Again, sculpture portrays easily and naturally the

human figure: it presents man the individual and man the type: it can convey the sets of ideas appropriate to those two with force and economy. But sculpture cannot, as can painting, convey easily both the individual and its surroundings. Sculpture can present the idea of the individual, but not the idea of the universe. In the mythology of painting there is a legend that a famous Chinese landscape painter did so beautiful a landscape that on one occasion a too sensitive connoisseur lost himself in it and was never seen again. That is to say, so completely had the artist presented a home for some spirit that the sensitive connoisseur fell a victim to his own aesthetic reactions. Sculpture cannot, owing to its nature, have any legend of this kind. It does not present a home for the spirit, but instead tends to present spirits without homes. But the generally satisfying work of art is that which expresses both an individual or group and also a world for it to inhabit and a world in which it is at least moderately at home.

It is because the ordinary sculpture group does not easily present or imply the latter, that its relationships are so often at fault.\* It relies often on something else to

\* It should be noted that the convention known as "the Relief" provides more of the element of an environment than does the group and does not, indeed, raise these difficulties in the same degree.

provide the "home," and often it is provided with no home; it exists in the void. We tend, indeed, to think of a work of sculpture in the void (Fig. 4) and the more famous the work—the more in the void. In people's minds *The*

only one function and not necessarily the central and most valuable. But sculpture as a fine art, since the Renaissance, has tacitly taken this as its central aim; and certain results have inevitably followed. Though sculp-



FIG. 4.—SCULPTURE IN THE VOID

*Venus of Milo* and Michelangelo's *David* are both figures in the void—figures on picture postcards to which certain ideas are attached or not—but which exist without an organic background.

Now, one of the functions of sculpture is doubtless to present here and there a naked idea—homeless and self-poised—product of intense individual vision. But it is

ture in the void requires enormous personal vision, it has been made the province of all kinds of lesser talent. The modeller, the carver, the skilled draughtsman, have called upon themselves to attempt what Michelangelo attempted. They have been taught to begin a work of imagination in the void. Hence the tragedy that follows upon many talented opening careers. In the studios of Rome, ever

year, young sculptors—those with the highest diplomas—may be found closeted and unhappy faced with the growing recognition of the insufficiency of their personal genius. Why, when they may say anything they like, have they nothing to say? The fact is that they are without the elementary relationships—the fertile limits of environment—necessary to ordinary creative activity. Yet these young artists, disappointed and disillusioned, might be happy engaged on some less ambitious task.

Again, hardly less embarrassing is the work of sculpture, studio-born, when it is a work of genius. New rhythms, new and intense forces are suddenly let loose. What is to be done with them? Where are they to rest? Handed on from one generation to another the work embodying them is for ever asking for a home. This problem begins with Michelangelo himself. His statues protest. They are demi-gods and elementals and their demonic energy seems to destroy their environment. When the author of this essay visited Florence, that market-town endowed by the gods, he felt a sense of pervading artistic conflict due, it seemed to him, chiefly to the work of Michelangelo and Benvenuto Cellini. These sculptors were concerned artistically with themselves alone. On returning from Italy he discussed this point with a brother architect who made to him an interesting confession. Once in his youth in Florence, this architect had attempted to measure-up the New Sacristy of Lorenzo. Left alone, and in silence, with Michelangelo's figures he became first uneasy and then alarmed. Trying to dismiss his fancies he concentrated upon his work—in vain. Those forms were terrible; they were presences in contact with whom he could neither contemplate nor work peacefully. They waited for his eye. As a trained architect he could not miss the profound unrest they conveyed. Though a man of considerable strength of character he confessed to being driven from the chamber with his work unfinished.\*

Michelangelo may have taken to architecture with an instinctive Latin desire to harmonise his sculptural works and provide for them a "home." To many architects it does not seem that he succeeded: it seems that he left instead to succeeding generations an insoluble artistic problem. The case of Michelangelo was doubtless partly due to the Renaissance and to its sudden stressing of individualist values; but it has certainly continued. In our day the intense personal element in sculpture and its disruptive tendency is clearly visible; it is, indeed, characteristic of some of our most forceful modern talent.

It is well, therefore, to recall that in Greece at the source of humanist sculpture there lay a clear artistic principle. Even when Greek sculpture had left the building that was its home and the direct expression of its universe, it

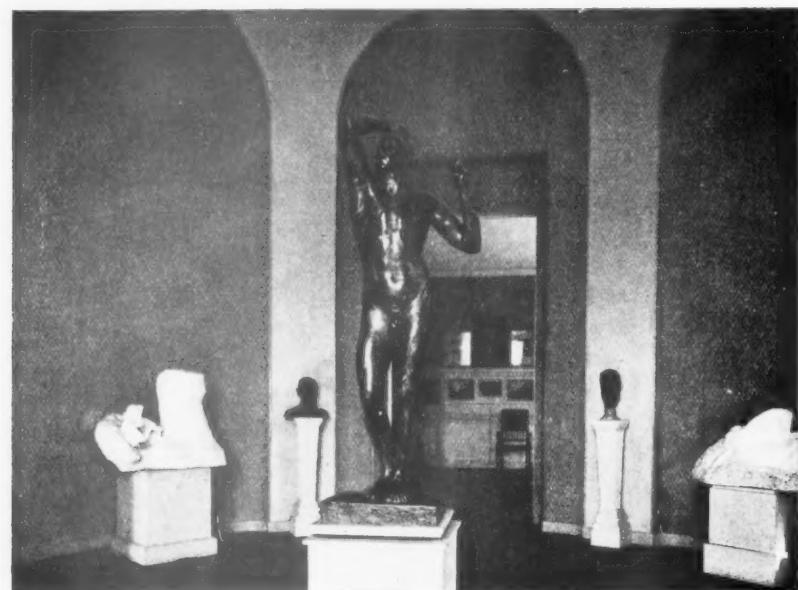
preserved as its object a fundamental harmony with its world rather than a fundamental conflict.

To the Greeks all art hinged on a stable relationship—on an equilibrium between man and the universe, between the individual and its home. Hence those specially Greek reciprocals—the Greek temple and the statue, the Greek drama and the theatre, the Greek vase and the figures upon it. The gallery interior should be a reciprocal of this kind. It should provide some kind of necessary relationship. One of the functions of architecture, indeed, is to provide such relationships. The figure known as the Anzio Maiden which was illustrated in Fig. 4 as in the void, is shown in Fig. 2 in its "home" in the Thermæ Museum.

## 2. THE MUSEUM PIECE AND ITS PROBLEMS.

Let us consider for a moment the plight of an antique statue—some rare Aphrodite—fished up from the Tiber or the Tyrrhenian Sea, and carried to the sale-rooms. Immediately wheels set themselves in motion, connoisseurs, agents, dealers, art-historians and museum officials go to Rome to see her. She has to be weighed artistically, placed historically, and assessed economically. Who will get her? Is she to go to London, Munich, or New York? Meanwhile, standing on a slab in the black-coated crowd with a step-ladder near her she is indeed a homeless creature. In Hadrian's reign, during the Greek revival she had been carried to Corinth and shipped on a merchant vessel bound for Ostia. Then, as now, the antique dealer was a world power, and Greek sacred sites were then a happy hunting ground. She was, in fact, bound for the sale-rooms of Rome, but owing to storm and accident arrives some 1,700 years late. Emerging from the waves, she finds a world changed, and yet not changed. What has changed is a paraphernalia, a mechanism; what has not changed is the desire in the minds of men to possess her and what she stands for. The passions excited by her—the disagreement of the historians, the desire for a *coup* on the part of the dealers, the ambition of the American curator, the anxiety of the German curator to fill a historical gap, the protests of the patriotic Greek chargé d'affaires that she must return to Greece, and acting upon everyone, the graceful, unchanged, and eternally desirable woman's form, are all obvious in the throngs around her. But if some English dilettante should stand and, looking across the worldly crowd at the calm figure, ask himself objectively what, with the best objects in view, had best be done with her—what answer could he give? Ought she to grace the halls of a merchant prince or international financier? Is she by rights the property of the students? Or in a democratic age does she, like some superb actress, belong to the masses? For each there is much to be said. The rich Macenas would appreciate her; and, moreover, in his salon she might be surrounded by sculptors and living artists. The students claim that modern archaeology alone can do justice to all

\* The same unrest is found in Michelangelo's mural painting. A significant legend in the mythology of our own time tells how one architect visited the Sistine Chapel and on leaving the famous interior urged the custodians to tell the Pope to have the ceiling whitewashed.



FIGS. 5 AND 6.—TWO VIEWS IN THE RODIN MUSEUM, HOTEL BIRON, PARIS

the problems she raises, the interesting transitional period, the technique, the traces of this and of that. And here let us examine for a moment the interest in antiques amounting to a passion that is growing in modern culture and keeping steady pace with the modernist and revolutionary tendencies. See in the throng a slight spectacled German with the brow of the scholar and the eyes and mouth of the plastic artist. His hesitating, rapt manner is peculiar. The dealers and connoisseurs stand aside in respect. He is, indeed, a new type of mind. Not styles and periods, but the living emotions of all art is his world. His knowledge is enormous, he has the German omniscience in historical facts, but they are only the background of his mind. His eyes go over the figure like a questing hound. He peers at the cutting of the drapery; begs that a photograph be taken here and here. He takes out a notebook and makes a rapid drawing and disappears. And some years later a book translated out of German will present in some refined circles a new word, an evocative term, in the kaleidoscope of æsthetic enquiry. A skilful photograph will illustrate it. From the refined circles the word will filter downwards; a clever art writer will espouse it; gradually an old set of works of art will take on a new significance, French women will see in the rediscovered shapes some enhancing curve—fashions will change, and out of the past will come yet another coloured thread to weave itself into the modern motley. It is vain to condemn the process; it is inevitable. The high price of antique works of art is an index, among other things, of the value ultimately set upon them by the comparatively barbarous modern world. Industrialism has conquered, but, like other conquerors, must learn inevitably from the higher cultures its victories bring it into contact with.

It is, then, fair to say that the students have a great claim to the lady in question. Apart from the above considerations, artistic evidence is required to-day in the

study of general history. This work of sculpture may shift an emphasis in the study of a period.

But let us set against their claim the claim of the public. Of course, it is not an explicit claim. If a referendum were taken in the penny Press as to whether an expensive antique should be bought for the nation, it is not likely that our collections would get very far. But when all is said there is still evidence of a deepening artistic consciousness. In spite of scoffers, the success of the Flemish, Dutch, Italian, and Persian exhibitions held in London, means a great deal. Taste improves, slowly. That improvement is more than a mere swing of the pendulum: a deepening artistic consciousness means an increasing sense of quality. Struggling against odds, that sense of quality exists and seeks to extend itself.

In the throng which our dilettante Englishman has been watching, there appears yet another type—a keen, courteous business man. English or American, who can say? Too considerate of others for an Englishman, too reserved for an American. He, too, is a new type thrown up by the modern world. He is a rich man and a passionate educationalist. Vain to discuss

with scoffers the ultimate value of his activities. In front of that statue he is quite as moved as any of the others. But unlike the others, the fever he feels must be communicated. Beauty for him is something that must be shared. In front of the priceless work this man does not wish to possess it; he is completely unselfish. He has only one desire, namely, that elementary school-teachers, technical students, young working men, hospital nurses, slum workers, all the invincible youth of the dark northern cities, should see that figure and see in her the flash of illimitable human achievement—the equilibrium and animation of great art—see in her what he himself sees. And this desire is instinct, not reason. He feels working through him the drive of the semi-educated towards education. His passion is not first a moral one—though morality has



Fig. 7.—VICTORIA AND ALBERT MUSEUM  
New setting of one of a pair Annunciation Angels in the Italian Renaissance Hall



FIG. 8.—THE THERMÆ MUSEUM, ROME  
The Anzio Maiden seen from point x on plan

its place in it—it is first a blind æsthetic hunger. To satisfy this and work for it is his *raison d'être*. Moving, as he does, in undistinguished circles among schoolmasters, extension lecturers, architects, parish priests, town-planners, among those who carry on their shoulders the naked burden of education, he knows and hears of the forces on the opposite side, the daily cheapening and falsifying of values by the cinema, the penny press, the advertising industry. Against the disciplined emotion of art there is always offered to the semi-educated the indis-

cipline of commercialised emotion. It is a neck-and-neck struggle. In the Greek figure before him he seems to see embodied an expression of that true and unchanging quality of the spirit that is independent of periods. If that work of sculpture will help a single young mind in the wilderness it is worth while. He is behind the endowing of a people's gallery in the poorer quarters of a great city. He will buy the figure and get So-and-So to design him a building fit to take it. But what should that building be like?

### 3. GENERAL PLANNING OF SCULPTURE GALLERY.

In the last section some of the conflicting claims upon a first-rate antique were suggested. When a number are together and are to be dealt with in a "collection" the difficulties are increased. Ideally, a good art gallery should serve art students, archæologists and special students, and the general public. But circumstances may demand that emphasis be laid on one or the other. And before everything else, in the planning of a new building, is the question of storage space. This is of supreme importance; its recognition in future is likely to alter museum planning. We are really only at the beginning of the

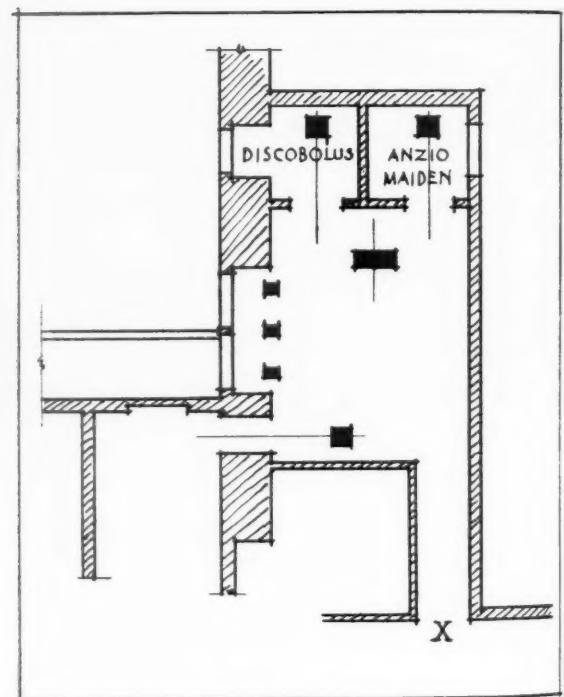


FIG. 9.—THE THERMÆ MUSEUM, ROME  
Plan, showing position of Anzio Maiden and Discobolus of Myron



FIG. 10.—THE THERMÆ MUSEUM, ROME. The Discobolus of Myron

age of public collections—if they continue only moderately they will have increased enormously in another hundred years. Already in many public galleries the exhibition rooms show only a selection on a given subject. This should be acknowledged in planning. In sculpture it is specially important, because the crowding of statues together produces a ludicrous effect (Fig. 18). A sculpture wing should have two floors, a ground or basement for the collection, and the floor above it for the selection, and there should be two or more luggage lifts commun-

cating. Coupled with the question of storage is that of easy change of exhibits. The upper gallery for the general public should be laid out with one main general object, namely, to give, quite simply, some artistic meaning to a few statues or groups. The means to this we discuss later. The lower gallery is store-room, atelier, workshop, and place for students of all kinds. It must be also accessible to the public if required. The lifts enable the easy staging of the exhibits in the gallery above and their removal, and there should be, down one side of the lower gallery,

a pulley and trackway. The mobilising of museum pieces will be required more and more in the future, because the cult of the exhibition and the exchange of exhibits is sure to increase. The same applies to collections of casts. Nothing is sadder than the wan troops seen standing closely together in a hard light as in the back of the Ashmolean Museum at Oxford. Yet such galleries are still to be found everywhere and do harm. Instead, a few casts should be properly placed and related, and varied from time to time; but in museums where there is inadequate storage space the galleries themselves must act as stores.

Therefore, the movement towards selection, heartily desired by many curators, hinges directly on planning for storage. The arrangement of two floors to a museum department suggested above is advocated in principle by Mr. Maclagan in a recent paper read before the R.I.B.A.\* He gives as an instance the Museum of Fine Arts at Boston in which, though the arrangement appears to have failed in other departments, it is successfully maintained in that of classical art. He points out that both floors are equally accessible to the public and that this is vital. "Let me repeat that there is no more difficulty in visiting the collection on the ground floor than those on the first floor, but the visitor to the first floor will find, to take an example, some two or three cases of picked Greek bronzes beautifully shown and labelled, and if he is satisfied with these he need see no more. If, on the other hand, Greek bronzes are what particularly attract him, he has only to go down a staircase to find himself in an equally accessible room where many more Greek bronzes are shown in carefully classified cases close together but perfectly visible; just as in the next room there will be whole cases of Tanagra figures and so on."

It should be noted that this lead in planning by Mr. Maclagan was not disputed by the eminent curators and directors present in the discussion that followed. At Cardiff, the principle of parallel galleries for public and students has been embodied by Mr. Dunbar Smith, the architect. But this is less useful for sculpture than the principle of superimposed floors, because in sculpture galleries both long walls should be free for window lighting of different kinds and for projecting bays, alcoves, etc. For a similar reason the exhibition gallery should be the upper of the two, because top-lighting is a vital necessity as a factor in the proper display of sculpture, though it is not, as some have held, all important. Lighting is, of course, fundamental to planning, and at this point we can summarise by saying that as much adjustability and variation in the angle of light is required as is possible, bearing in mind that the general modelling of a figure is best given by a not too strong top light with a moderate or dark floor.

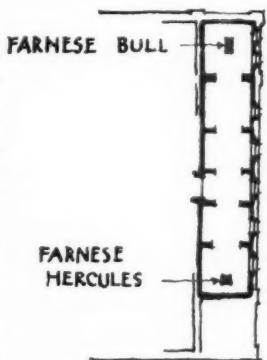
#### 4. SOME FAMOUS EXHIBITION ROOMS.

The old art museum was founded on the palaces of the Italian dukes and cardinals. They had made the early

collections, and their homes naturally became the models for galleries. Unless special halls were made, as at the Vatican, side-lighting was the general rule. It is not, however, exactly the kind of side-lighting we know in England. In Italy a dark blue sky area will not give as much light as white clouds, but, on the other hand, a beam of sun falling on the floor will give a bright patch which will become a source. Hence, in Italy, diffused light from floor patches is generally added to ordinary side-lighting. An illustration of this is given in Fig. 3, showing one of the older halls at the Conservatori Museum at Rome; the floodlighting from the floor can be seen by the shadows on the right-hand wall. And owing to the intensity of the light, dark walls and ceiling are natural. The room of the Farnese Bull in the Naples Museum is a good example of this old Italian method. An oblong room is divided into large bays and groined as to its ceiling. Architectural features exist, but are not emphasised. Light comes from windows on one long side only. The Farnese group itself is on the axis as shown on the sketch plan, below, and there are one or two pieces, not more, in each bay. This is one of the few Neapolitan galleries that is not overcrowded, and this contributes to its success. A crimson cloth on the walls gives a dark background and prevents diffused light; the vault is grey and white. The effect is melodramatic; but so is the spirit of the famous piece. The window from which the highly emphasised side-lighting comes is not seen, owing to the recessed bays. The marble limbs gleam against the red plush. The group and its setting achieves a complete and characteristic sophistication.

In the Vatican many halls were specially built for sculpture and in them top-lighting and high side-lighting can be studied. These halls lead from one to the other, and contrast in shape on plan, on the principle of the Roman Baths. The general effect of statuary and classic architecture combined is undoubtedly grand; it is the Roman method, rather than the Italian palace method. It is not satisfactory for students, nor does it give opportunity for sensitive interpretation of individual works. The "Greek Cross Hall" containing Apollo and his Lyre and the porphyry sarcophagi has a flat dome lit by tympanum windows in the arms. The large "Round Hall" has a high semi-circular dome on attic round-headed windows. The general treatment of walls in the Vatican consists in niches below and recessed square or oblong panels above for reliefs. These reliefs are inaccessible and often nearly invisible. The long Statuary Gallery with a segmental vault has windows on the north side only, but not the entire length, in the upper half of the walls: the heads of the statues come up to the window-

\* R.I.B.A. JOURNAL, 6 June 1931. See also Royal Commission on National Museums. Oral Evidence, Interim Report. Q. 2810.



sills, and their faces are therefore nearly invisible. The most interesting is the long Chiaramonti Gallery, Fig. 11. It is a barrel-vaulted corridor, about 27 feet wide, and top-lit, as shown on the plan. A criticism of the Chiaramonti Gallery is that the floor is too light and gives too much diffused light; this is always a danger with top-lighting. This gallery has an effective dome and apsed alcove at its centre. The group known as *Father Nile* is placed here: the top light of the alcove at certain times in the after noon gives the effect of lime-lighting this piece by the direct rays of the sun while the standing figures behind

are left lower in tone (Fig. 12a). The photograph taken by the author shows this effect. There is no doubt it enhances the famous work and makes it appear more "teeming." A gallery with a series of such alcoves, more scientifically lit, would make an interesting modern treatment. When all criticisms are made of the Vatican it remains an epic building. The rhetoric of the figures tells. Here Winckelmann penetrated to Greek art through these Hellenistic counterfeits, and Goethe in his cloak compared himself to the masterpieces of the past. It should be noted, however, that the Vatican galleries rely

on the intensity of Italian light and on the floodlighting from brilliant patches of sun upon floor and walls. In northern countries the heavily architectural galleries have deservedly fallen into disrepute. A cavernous but

multi-columned interior with a remote insufficient top light can be a terrifying thing and represents the worst form of sculpture gallery. An example of this is the dome in Schinkel's Altes Museum in Berlin. Round its circumference, between the regular architectural features, stands a remorseless ring of figures, varying slightly in scale, with light upon the tops of their heads, nose tips, knees,

and other projecting parts. The desolate *Mausoleum character* is complete.\* At the same time, architects cannot but note that bad classic design rather than good has brought this kind of gallery into disrepute. Delicate classic shapes, unemphasised, while they tend to impose a certain order, need not drill the whole display. It is a question of tact in treatment. But when a gallery becomes crowded the classic interior certainly gives the

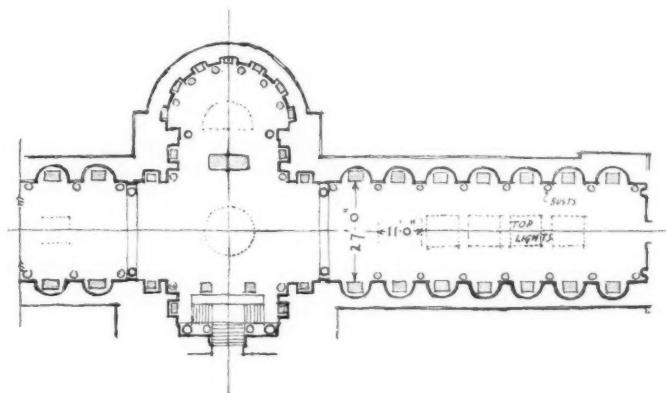
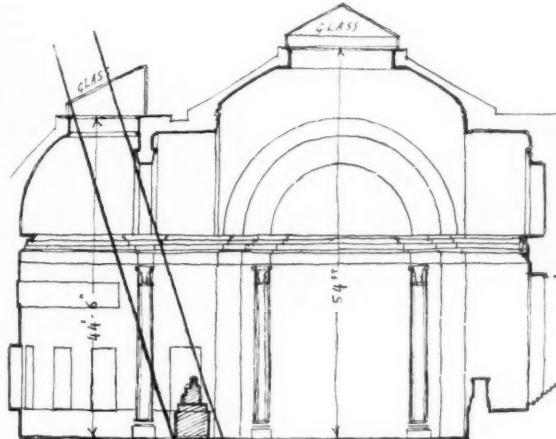


FIG. 11.—CHIARAMONTI GALLERY IN THE VATICAN PLAN



FIGS. 12 AND 12A.—SECTION OF THE CHIARAMONTI GALLERY  
Showing lighting of Father Nile (opposite)



least freedom. On the other hand, in new galleries with sufficient storage space, where overcrowding is not permitted, an impersonal and quite undecorated architec-

\* It would not be fair, however, to take the domed hall as typical of the spirit of the Altes Museum and its collections. Other parts of the building express a very different conception of the problem.

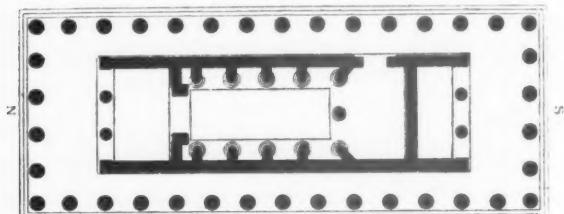
tural treatment such as in the new Mussolini Museum in Rome has certain advantages (Fig. 15): it can unify the whole collection.

Architectural ornament and highly stylised features, however, must be omitted. In the Rodin Museum at the Hotel Biron in Paris a room with inconspicuous Louis XV ornament can be contrasted with a room of the same shape without any ornament (Figs. 5 and 6). A bronze central figure occurs in each case and also enables a comparison in background tones to be made. The right relationship of the simpler room, having the darker tones, to the bronze figure standing within it, is obvious.

The way in which architectural features can make a setting more difficult is illustrated in Fig. 7. This shows a new setting of one of a pair of Annunciation Angels in the Victoria and Albert Museum. The figures seem to demand a position at the end of a long solid. This has been given them, but the long solid, not unlike a buttress, comes against a pair of coupled columns. If the coupled columns had been a plain pier the juxtaposition would have been more appropriate. This suggests that a curator might, in specifying for a new gallery, demand no mouldings, and no unnecessary duplications and responds.

#### 5. THE THERMÆ GALLERIES.

To pass from the Vatican to the Thermae is to discover a different sculpture and a different architecture. The shell of the Thermae of Diocletian has been fitted up with a series of comparatively simple compartments (in no way resembling a Roman Baths) and containing some of the loveliest pieces of classical statuary. Let us consider for a moment the setting of cult statues in Greek shrines, as those shrines appeared in early times before the accumulation of sacred objects turned them into the junk shops so often described by Pausanias. The image of the god was intended to dominate the interior. The image was often so large that the cella of the temple appeared comparatively small. A diffused light came through the Parian marble tiles of the roof\* and light also struck through the large eastern doorway. Pausanias records a black marble floor in the Zeus Temple at



PLAN OF THE TEMPLE OF APOLLO, BASSÆ

Olympia. From outside the image was seen through the frame of the door. In the interesting temple of Apollo at Phigaleia near Bassæ the image as seen from the main portico was beyond two doors and an intervening hyper-

\* Marble tiles are said by Pausanias to have been first introduced by Byzes of Naxos, who may be considered, therefore, as the originator of top-lighting.

thral chamber. The interior, founded on Cockerell's drawing, is illustrated in the Frontispiece. If we analyse the broad effect we find that it consists in a proper combination of three elements, namely, dissociated figure, cell, and opening to cell. These elements doubtless developed from ritual origins, but it is not unlikely that there came a point in Greek art when they were recognised aesthetically. The north and south orientation of the Phigaleia Temple, giving an eastern opening to the shrine in the side wall, suggests this. *As soon as the statue becomes dissociated, the cavity round it becomes significant and should enter into the design.*

Whether deliberately or by accident, the truth of this principle is illustrated by a number of settings in the Thermae Museum in Rome. By means of small chambers opening out of the main rooms, and separately lit, certain statues are isolated and appear to have received individual interpretation. The author was enabled by the courtesy of the Museum authorities to make some special photographic studies. The *Anzio Maiden* already illustrated (Fig. 2) is shown at a greater distance in Fig. 8. The floor space is kept clear between her and this point of view. The opening into the cell is about 10 feet high and serves as a frame. This main room has two cells off it, as shown on the sketch plan, Fig. 9. It is about 30 ft. wide, has walls very dark in tone, and no top light. There are very few pieces in this main room, thus leaving large unencumbered floor areas which add to the values, as can be seen in the illustrations. The *Discobolus* or *Discus Thrower* by Myron is shown in Fig. 10. It is very impressive in this setting, although figures of this kind, celebrating athletic contests, were probably designed for an out-of-door light. In Fig. 13 is seen through a door a statue of *Aphrodite*. Obviously, the tone values of a figure merging and contrasting with those of cell walls and those of any related room must play a large part in the success of the setting. Compare this *Aphrodite* with her subdued top light and lighter walls, to the *Aphrodite of Cyrene*, Fig. 14, with a strong top light and darker walls.

This sensitive individualised treatment is obviously different from those considered in Section 4. For convenience and because there is a clear aesthetic principle involved, connected as we have shown with Greek temple architecture, this method of setting is called here the Greek method. In its results it appears to the author to be incomparably more beautiful than any other. It requires for its full purpose, adjustability of lighting—that is to say, the possibility of varying or combining top-lighting, side-lighting and top-side lighting.

#### 6. MUSSOLINI MUSEUM OF SCULPTURE.

In the new Mussolini Museum and in the reconditioned galleries of the Conservatori Museum in Rome yet another treatment can be studied. Like the case of the Thermae the number of pieces shown is much more limited than in the older type of museum; but they are not treated as individually as in the Thermae. Instead, in the Mussolini Museum, they are made to take their part in an "architectural" interior, but one reduced to its simplest terms. The "architecture" consists of planning for vistas and interconnecting rooms, and also of care-

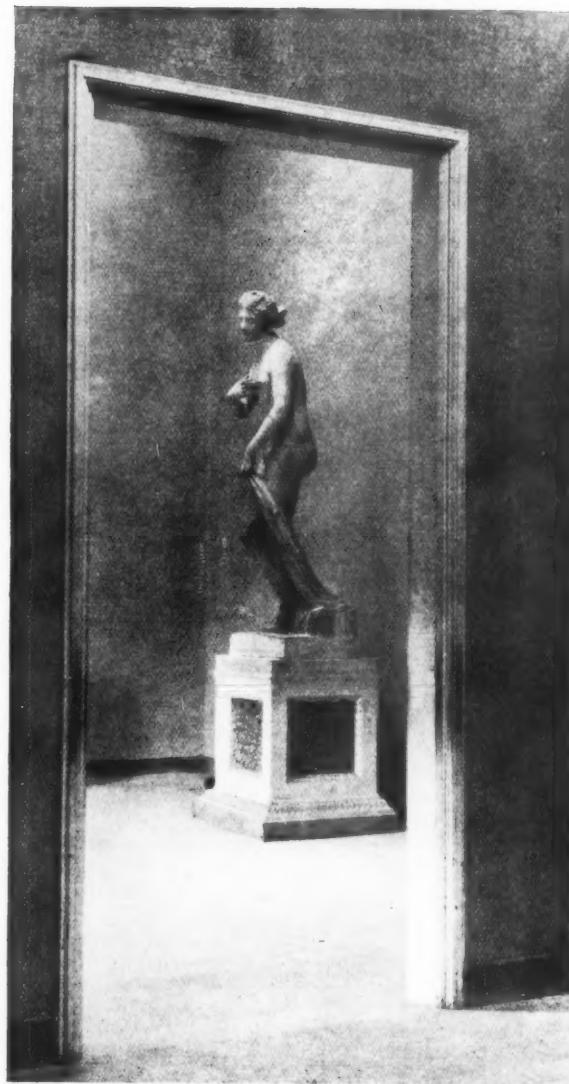


FIG. 13.—THE THERMÆ MUSEUM, ROME

An Aphrodite against lighter walls

(Compare this with Fig. 14)

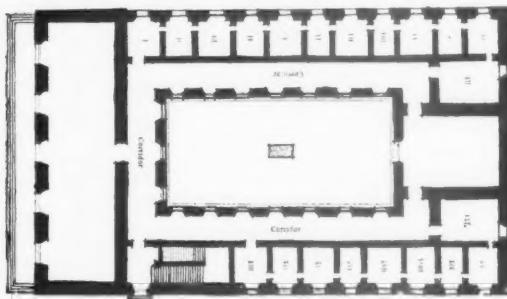
fully proportioned voids and solids, round-headed openings without mouldings and nicely graduated wall tones. This is shown by photographs taken by the author (Figs. 15 and 17). It can be seen that the architecture tells more effectively owing to the complete lack of ornament. Both side and top-lighting is used, but chiefly side-lighting. Special attention is given to the mounting and setting of busts, an example of which is illustrated in Fig. 17.

In the Conservatori galleries the smaller pieces are in side-lit rooms having light green walls up to a capping, above which is a light coloured vaulting giving spaciousness. Floors are paved. There is no dado. The pieces are ranged as shown in Fig. 16. The walls are not spotted with reliefs above the chief exhibits, but have a dark skirting which runs round the room and the bases have low white plinths against this skirting. Thus the room is unified at floor level and the figures are free against the ground of the wall.

The sensitive methods described above, as found in the Thermae, Mussolini and Conservatori galleries, are a great advance on the old methods, and suggest a new attitude to the problems involved. Contrast the row of ingenuous Venuses from the National Museum at Naples illustrated in Fig. 18.

#### 7. THE COPENHAGEN GALLERIES.

The Thorvaldsen Museum in Copenhagen is interesting, because it was designed and built in the sculptor's lifetime to exhibit only his own works and in the best possible way. Thorvaldsen arrived from Rome a national hero, with all his works in a battleship, and it became a national duty to provide a home for the famous pieces. The architect Bindesbøll naturally embodied in his building many of Thorvaldsen's ideas as to requirements. The plan of the building is shown below. The Museum



THE THORVALDSEN MUSEUM, COPENHAGEN

consists chiefly of a number of cells down the long sides of the building, with larger halls on the short sides and open court-yard in the centre. The cells have barrel vaults and vary in width, as can be seen on the plan. They are about 18 feet long and the average width is about 12 feet; they have each a high tympanum light. Each cell contains a large single work against the end wall

\* The cells are about 15 feet to the springing of the barrel, which has a radius of about 6 feet.

facing the window and a number of reliefs on the side walls.\* The reliefs are well lit, as can be seen in Fig. 19, which shows also the vista through the suite of cells. The doors from one cell into another are about 3 feet wide and 7 feet high and do not give a large enough aperture between cells. Compare them to the large doors to cells in the Thermae galleries. The walls of each cell are coloured differently, but the colours are hard and disagreeable, and reveals to windows are painted black. The high side light was due to Thorvaldsen's wish to have the head and upper part of a statue in a brighter light than the lower part. The general result is too hard a light upon the dead white of the Carrara marble. The statues seem to be asking for a patch of Italian sunlight on the floor to soften their tones. The high windows to cells on the river side have an unimpeded sky area and carry out the designer's intention. On the Palace side, however, the new buildings of the Christiansborg to a great height (built since the erection of the Museum) have cut off some of the sky area so that the upper back portion of the cell is in shadow and the statues on this side have a darkened wall behind them (Fig. 20). The main staircase gives an interesting setting at mezzanine level for the great Hercules.

The large Art Museum known as the Ny Carlsberg Glyptotek is used for sculpture of all periods and presents some interesting experiments. In it can be seen French nineteenth-century pieces in all their theatrical activity in architectural halls of the period, insufficiently lit by high semi-circular windows. In another hall of the same period can be compared to the French, the untheatrical and the reposeful works of Bissen and other Danish sculptors, disciples of Thorvaldsen. The beauty and equilibrium of the Danish work tells. A large central Winter Garden with palms and other foliage is also used as a setting for nineteenth and twentieth-century pieces. The great Stoa or Festsaal built by Kampmann is discussed in the next section, and we will only consider here the long galleries and pavilions in the later wings.† The hall containing the Amazon of Polykleitus is barrel vaulted with a top light, and has a green floor with black margins under the statues. The corresponding long hall containing the Asklepios has the same black margins with an ochre floor and grey walls. Angle pavilions are cleverly lit by a very large overhead area of diffused light from inclined white walls above cornice height (see the section, Fig. 22). In all these rooms the cornice is too low, appearing to come down upon the heads of the statues (Fig. 21). The floor patterns also introduce a restlessness that detracts from the total effect. There is everywhere apparent a definite attempt at rhythmical setting achieved by alternating busts on high columns with busts on low columns and with statues. This is clearly illustrated in Fig. 23, in which an attempt is made in a circular hall to harmonise pieces of different size and scale by placing them between high columns of equal height supporting busts. In this hall the floor is green, walls red and light-

† There are, in addition, a number of large cells with barrel vaults and apsidal ends; they have large doors about 9 feet by 5 feet interconnecting. The rectangular portion of the plan of each cell is about 12 by 24, with an apse of 6 feet radius. They are lit by large tympanum windows.

ing as in Fig. 22. The green cippolini shafts attract too much attention to themselves. This method appears to the author to give too strong a pattern arrangement and seems less satisfactory than the careful choosing of pieces of different sizes for juxtaposition as illustrated in the Conservatori Museum (Fig. 16).

#### 8. LIGHTING AND STUDENTS' REQUIREMENTS

The least satisfactory general effect in a sculpture gallery seems to be that produced by remote top-lighting without side-lighting of any kind; a monotonous and claustrophobic feeling is produced. This is noticeable even in the Elgin Room and suites in the British Museum; some judicious side-lighting combined with the top light would overcome this.

When extensive top-lighting is reflected back by a bright floor, then too great a diffusion occurs, as in the Renaissance Halls of the Victoria and Albert where, owing to diffusion, lighting of statues is dull, and reliefs are not well seen; compare the modelling in Fig. 7 with a light floor, to that in Fig. 21 with a dark floor.

Experts are by no means agreed about the best means of lighting sculpture galleries, and from what has been said it is probable there is no "best means." That is to say, every kind of lighting is required. The problem for sculpture is easier than for painting in so far as sculpture is not glazed; but there are many difficulties. In northern countries there is the root difficulty of getting enough light; and for that reason large lighting areas are required whether of one kind or another, and this initial requirement must never be lost sight of. In this respect the ample lighting secured in the angle pavilions of the Ny Carlsberg Glyptotek, Copenhagen (Fig. 22), by means of inclined coves, should be studied. We have already made the statement that the general modelling

is best given by a not too strong top light with a subdued floor. In addition, students require some adjustable diffusion of light to soften the general tone. Subtle variations can only be studied by a proper diffusion. Dramatic side-lighting is not generally useful to students. But

opinions differ as to the amount of light required from the floor. In England the floor is not liable to furnish, as in Italy, a brilliant sunlit patch capable of foot-lighting the whole room; therefore, it can be lighter in tone than in the Italian galleries, but it must not be too light, as is the case at the Victoria and Albert. Foot-lighting is not generally desirable. In England a floor flagged with York stone, as in the British Museum, gives enough diffusion, but not too much. We have already noted that according to Pausanias the floor of the cella of the Zeus Temple at Olympia was black. Walls must not be the same tone as the pieces of sculpture, nor too dark. In England we rely on a certain diffusion from wall surfaces for all purposes. A light French grey is good for the walls of sculpture galleries, so also is a pale green and a lavender.\*

Careful consideration should be given by architects to the special requirements of students. Professors Beazley, Robertson, and Ashmole, in their joint pamphlet "Suggestions for the New Exhibition of the Sculptures of the Parthenon," lay down principles which clearly express the student's point of view. The Parthenon marbles are claimed by them first as works of art having a value as such compared to which their decorative function as architectural ornament and their educational use as



FIG. 14.—THE THERMAE MUSEUM  
Aphrodite of Cyrene against dark background

\* The Greek-Roman galleries in the British Museum recently renovated have been colour-washed with a kind of lavender-grey and a blue-grey; these tones, seen one beyond another, have an agreeable effect; also, they give depth to shadows without being themselves too dark.



FIG. 15.—THE MUSSOLINI MUSEUM, ROME.

illustrations of mythical and historical events "are by comparison accidental and trivial interests which can indeed be better served by casts." "Above all," they continue, "they must not be regarded as trophies for display, but as precious relics held in trust for civilisation and the world." Two valuable definitions are given:—

"As works of art they need a setting in which they will be visible and pure.

"*Visibility* means placing at such heights and in such positions that the fine detail and finish of the marble can be easily seen and enjoyed, while enough space is provided at front and sides for appreciation of design and effect.

"*Purity* means the elimination of any alien elements that may disturb the contemplation of any part of the sculpture. Such disturbance may come either from architectural devices belonging to the design of the gallery, or from illustrative material, or from ill-placed portions of the sculpture itself."

A new building, say the authors, "must not dwarf the sculpture by great height, nor disturb it with architectural tricks and ornaments, flights of steps, railings, balustrades, and elaborate ceilings, doorways, walls, floors or furniture. A grandiose setting cannot add impressiveness to the sculpture, but will do violence to its dignity and beauty." Also the following suggestions are of value:—

"All the sculpture must be set on the level of the eye. The frieze and the pediment-statues should be mounted slightly lower than they are at present,\* and the Metopes must be brought down to the same height. The slabs must not be embedded in the walls, but mounted so that their backs and edges can be examined if need be."

These lucid views are put forward by their authors with the acute problem of the Elgin marbles situated in London in mind. They amount to a plea that in this case the students' requirements are by far the most important and should condition the whole design of any new building provided for them. We must recognise also in their suggestions a reaction against the pseudo-

FIG. 16.—THE CONSERVATORI MUSEUM, ROME.  
The placing of smaller pieces

scholarship of the classical architect. An example of the danger inherent in the attempt of the architect to provide an antique background is illustrated in the Festsaal or

\* The frieze at present is 4 feet 11 inches from the floor to the underside; the pediment-statues are 4 feet 9 inches from the floor to the top of the black tabling on which they rest. (Note by the author.)

central stoa in the Ny Carlsberg Glyptotek at Copenhagen. Here a Hellenistic order and portico is used in a hall designed for Hellenistic and Roman statuary. The mottled grey and ochre marble floor, with a noticeable pattern, gives a certain Roman vulgarity; the shafts are both mottled and fluted. The result artistically is that the floor bewilders, and the mottled shafts actually compete with the statues set between them. In the aisles a green plinth 5 feet high destroys the wall as a background and many busts are cut by the line of this plinth. The architecture may be correct as to period, but the art is wrong. Such examples make the scholar in sculpture suspicious of the scholar in architecture. It is a pity that this is so, because, in the opinion of the writer of this essay, the relationship between the two is really more interesting than either taken in isolation. But, as the professors suggest in their pamphlet, casts and not the original marbles could be used quite well for architectural experiments and for purposes of historical instruction.

But also behind their suggestion can be seen the partiality of the pure student's attitude. Nothing must be admitted that can disturb the highly sensitised appreciation of a "precious relic" by those able to appreciate it. Architectural links of all kinds, not only staircases and balustrades, but floors, walls, ceilings, everything, come under their ban. The student does not need any environment, good or bad, because a first-rate work of sculpture, if left alone, will induce its own. Is it not better, after all (so they suggest), if left in the void? "*A worthy setting*" in the words of the suggestions, "*can only be one in which the sculpture is allowed to find its own expression.*" But alas, however much it is "allowed," it need not do so at all for the uninitiated, for those who are not able, without assistance, to see what the student sees. For the sake of "purity" as defined above, everything must be sacrificed. In case the student shall run the risk of not experiencing enough, the masses must run the risk of experiencing nothing at all! But an intelligent impersonal setting might give a clue to the non-student, and at the same time not too much disturb the student.

#### 9. DESIGN OF MODERN EXHIBITION ROOMS

From the above evidence, what general form should the exhibition rooms in a modern gallery take? Let us assume the adoption of the double floor plan with goods lift, discussed in Section 3, as giving certain obvious advantages. Then the upper or main floor is intended for the general public, though the public is not to be excluded from the working and storage floor below. First, what kind of sculpture exists in the collection? What are the curator's views on settings? What is the future policy of the gallery? As usual in modern planning problems, the much-to-be-desired isolation of requirements is probably impossible and the galleries are to provide for all kinds of work requiring all kinds of settings. Then at least a spacious entrance hall and staircase vestibule should be provided to offer the permanent monumental setting that some figures require. A good example is



FIG. 17.—THE MUSSOLINI MUSEUM  
Example of the setting of Busts

found in the Cardiff Museum vestibule by Mr. Dunbar Smith, in which a fine figure by Mr. Goscombe John finds its natural place on the staircase. Then for the main display an architect might proceed upon the plan of a wide-span gallery of some length, top-lit over its whole expanse by a glass ceiling, and having structurally a quite unimpeded floor area. But, in addition, there should be



FIG. 18.—AN EXAMPLE OF THE OLDER METHOD OF SETTING

certain windows; these should not come in every bay of structure but, say, in every second or third bay, so as to leave unlit wall spaces along both sides. Then, within this shell, build light cell structures coming, where required, opposite window areas or wall areas and planned in some simple relationship to two or more interconnecting rooms larger and centrally placed. The required mixture of top and side-lighting could be adjusted by a greater or lesser opening of ceiling to particular cells under the main glass top. The windows should be tall and have shutters able to cover either the upper or lower half, thus enabling side light or top-side light to be produced. The partition structure should be plastered as to its walls to give the appearance of solidity: a compressed fibre partition, plastered, could be removed and rebuilt in a couple of days when a rearrangement of floor space was required. No mouldings or architectural ornament are required. Ceilings could be of even lighter screening material. Such a plan would suit the many cell methods of presentation used in the Thermae Museum in Rome, as described above. It would give great freedom to the curator, who could then design new combinations of cell, opening, and surface tone, to suit his exhibits and could clear a wide space by demolition when he required it.

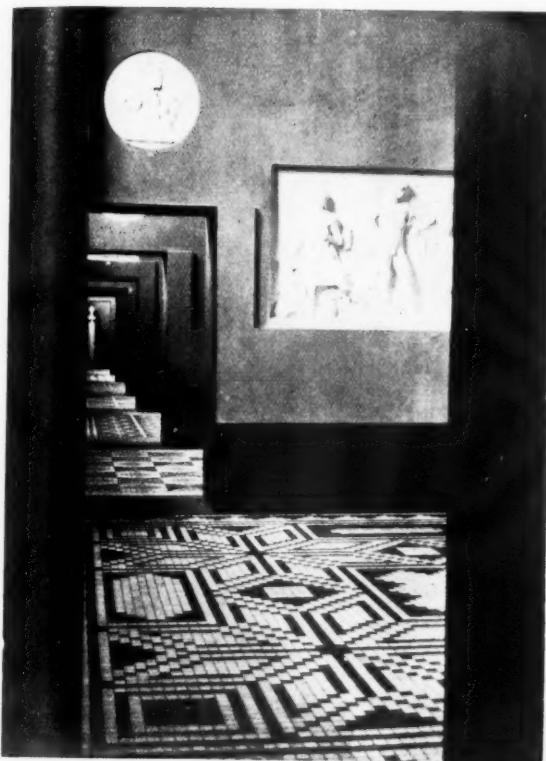
But some curators might be embarrassed by so much freedom. Another plan would be the extremely simplified architectural setting of the main halls of the Mussolini Museum, as described above, forming permanent structure. This would not prevent a limited number of individual cellæ for figures requiring special interpreta-

tion. The treatment in the Mussolini Museum both unifies the collection and gives a good deal of freedom. Architecture cannot really be eliminated while the exhibits are within doors, so it had better be enlisted on the right side. Let it give delicate impersonal sequences of cell and surface and framed opening.

The object aimed at should be not the presenting of the largest number of statues possible, but instead the maximum artistic experience of sculpture for a given outlay of money and energy. This implies a practical point: a sufficient number of seats should be provided at various points of view. The enjoyment of sculpture means contemplation, and it is easier to contemplate sitting down.

Sculpture of a certain dynamical kind, illustrated in Rodin's later work particularly, requires drastic treatment as to its setting. Far the best setting for the famous *Penseur* is in that curious Gothic revival building used by the sculptor as a studio at the Hotel Biron. It is illustrated in Fig. 24. If this was what the sculptor intended, this exact setting could be reproduced in a gallery of the kind here suggested. On the other hand, the bronze *John the Baptist* is so obviously walking forward that no home for him can be found. For some seventeen years he has been walking about the Victoria and Albert Museum, a trial to his custodians, and now appears to be on the point of bumping sideways into the portrait of his creator!\* Other works again, like *Man and His Thought* at the Hotel Biron, and several of that class in

\* Since these words were written he has again moved.



FIGS. 19 AND 20.—THE THORVALDSEN MUSEUM, COPENHAGEN, AND STATUE OF PRINCE POTOCKI (right)

the Victoria and Albert Museum, are so obviously sculpture in the void that they had much better be put in the void; they should be seen in a series of small egg-shaped concavities without distinguishable floor walls or ceiling, that is to say, without any plastic relationship at all. Since they are often small, they could be placed in small cells of this kind. They are equally out of place at the Hotel Biron, and in the Victoria and Albert room in front of sixteenth-century tapestries.

The exhibition rooms suggested above as a solution of some of the modern problems would be only a part of the collection. On the floor below, necessarily side lit, the works not at the time displayed above would be placed, and would probably be presented both as to accessibility and spacing much as are our ordinary galleries to-day. Special students' work would, of course, take place in the lower gallery. Art students should be permitted to sketch and photograph without permits freely on both floors.

#### 10. FUNCTION OF THE MODERN ART MUSEUM

Sculpture only has been considered in this essay, and any detailed discussion of allied subjects is outside its

scope. Sculpture presents some of the problems of the art museum in their extreme form, and for that reason it is worth while carrying the discussion a step further. What should an art museum seek to be and to supply? The author is one of those who thoroughly enjoys entering a new museum. Nothing is more delightful on foreign travel, after having explored a new city, its buildings, its crowds, its public gardens, than to seek out the museum and look in it for some secret bent, some set of interests and preferences, some clue to race character and history. Thus it seemed to him that in the German museums can be clearly seen that faculty for art analysis that finds its richest rewards in the study of Greek archaeology, and that the German work of Curtius in Olympia and Dörpfeld in Athens has its origin in Berlin and Munich and in the analytic German genius. And, conversely, no French museum speaks of other cultures as plainly as of that European taste that has come from a thousand French influences. And where, in addition to such secret interests, the museum happens to be a restful and beautiful place, not too crowded with competing objects but yielding a quiet ground tone of its own, then the traveller is even more grateful. The museum must always offer itself to the cultivated traveller. But this is a worthy object. The education that counts is the education a man gives himself for his own pleasure, cultivat-





FIG. 21.—NY CARLSBERG GLYPTOTEK, COPENHAGEN. Hall of the Muses

ing tastes that are his own and not others', identifying himself with this or that field, discovering in our rich European heritage traces of the ancestry of his own mind. The taste of a nation rests largely upon the leisurely reactions of educated men in this way. From the evidence given before the Royal Commission on National Museums and Galleries, two opinions on the function of the art museum seem to be held. Professor Rothenstein

holds that a museum like the Victoria and Albert was founded first on behalf of the living crafts and industries of the country and should first of all minister to these and stimulate the resource and inventiveness of artisan and craftsman. He maintains that instead of doing so it has only fostered the antique shop.\* On the other hand, the view was expressed by Mr. Maclagan that in addition to helping the crafts and industries of the country a very valuable function is fulfilled by the museum in educating the potential purchaser.† And this certainly takes place. The reactions of the study of the antique on modern taste has been touched upon in Section 2 of this essay and it is there suggested that its influence is subtle and inevitable.

The answer is that the function of the museum is to supply both. In live periods such as our own the analytic and the creative sides are always equally active and always tend to react upon each other. The evidence before the Commission also showed that, though certain criticisms stand, yet there is a great deal of direct reference from manufacturers and craftsmen to the museum authorities.

The criticisms in regard to the study of sculpture, however, are largely admitted. "It is notorious," say the Commissioners, "that this country has no facilities for the study of comparative sculpture such as are provided by Government institutions in France and Germany," and they go on to advocate a museum of casts. In the author's view casts should always be employed in conjunction with original pieces. The casts should supplement and amplify the marbles and the marbles serve always as an artistic check on the casts. There are enough good original pieces in London, specially if supplemented by good casts, to form a school of comparative sculpture if they were exhibited and interpreted in the right way. What is required is a first-rate sculpture department, which should include cast-making and exhibiting and which could use casts for intelligent experimenting in new settings and relationships.

This is specially desirable in connection with an important field of ancient art, namely, chryselephantine statuary. The author has seen no evidence of a serious

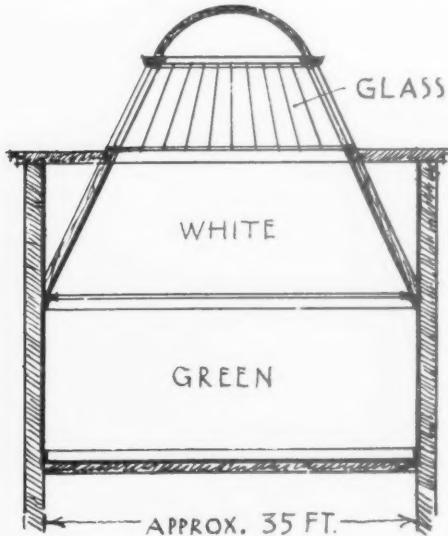


FIG. 22.—NY CARLSBERG GLYPTOTEK. Section of a pavilion

\* Royal Commission on National Museums. Oral Evidence to Final Report. Q. 3457.

† *Op. cit.* Oral Evidence to Interim Report. Q. 2779, also Memorandum, pp. 249-251.

attempt anywhere in Europe to study this subject in three dimensions, much less present it to the public. It is important, because it lies at the root of all Greek architecture. The Greek temple was the outside of the chryselephantine shrine and both statue and shrine were polychromatic. Greek colour was an absolutely vital element in Greek temple building. The marble shrine had to hold its own against the enormous, overdressed, and highly ornate "waxworks" that it housed. But then such craftsmen as Phidias were employed on both and took both for their province. The polychromy, of course, included gilded metal work and (externally) the black of cast shadows, and the two elements, gold and black, are able to harmonise strong pure colours. Within the portico floodlighting from below was all important. To-day experiments on colour harmonies are required. Formal colour in European culture, as distinguished from the art of painting, is blind and anarchic, and waiting for a lead from the Acropolis Museum at Athens. But bold experiment is required on large-scale models, and this could be done in such a sculpture gallery as is suggested in this essay.

The view of the museum as first and foremost a place for the preservation of precious relics for the sake of students of archaeology has been discussed in Section 8. Certainly a museum must include this function, but it

must be something more. Since curators are generally distinguished students, it can be said that so far the archaeologists have had it all their own way. The public have not criticised, but have taken what was presented. Yet even if the relics remain precious—and they vary with learned fashions\*—something more is needed. Thousands of educated people who visit galleries have no love of museums and half the arts of the world are unknown to them. They are bored; they have no clue; the link that can give meaning is absent. Yet a "museum," as "Home of the Muses," should give something of the spring and source of all art—should not repel but attract. Some sacrifice of "purity" as defined by the student may be necessary for the sake of "meaning" on the part of the general public.

Again, art is coterminous with life and has all sorts of settings and the settings themselves require study. Where should they be studied if not in the modern art museum?

\* In the British Museum before the war the "*Mourning Woman*" had an honourable position. She was in the opinion of many the most beautiful single object in the Museum. After the war she was moved to a less honourable place and called "*The Head does not Belong*." Now she is banished where she can scarcely be seen and called nothing in particular. Yet artistically she remains exactly what she was. She is still beautiful and seems to follow behind our hopes—as indeed she was designed to do—but humbly now and at a distance.

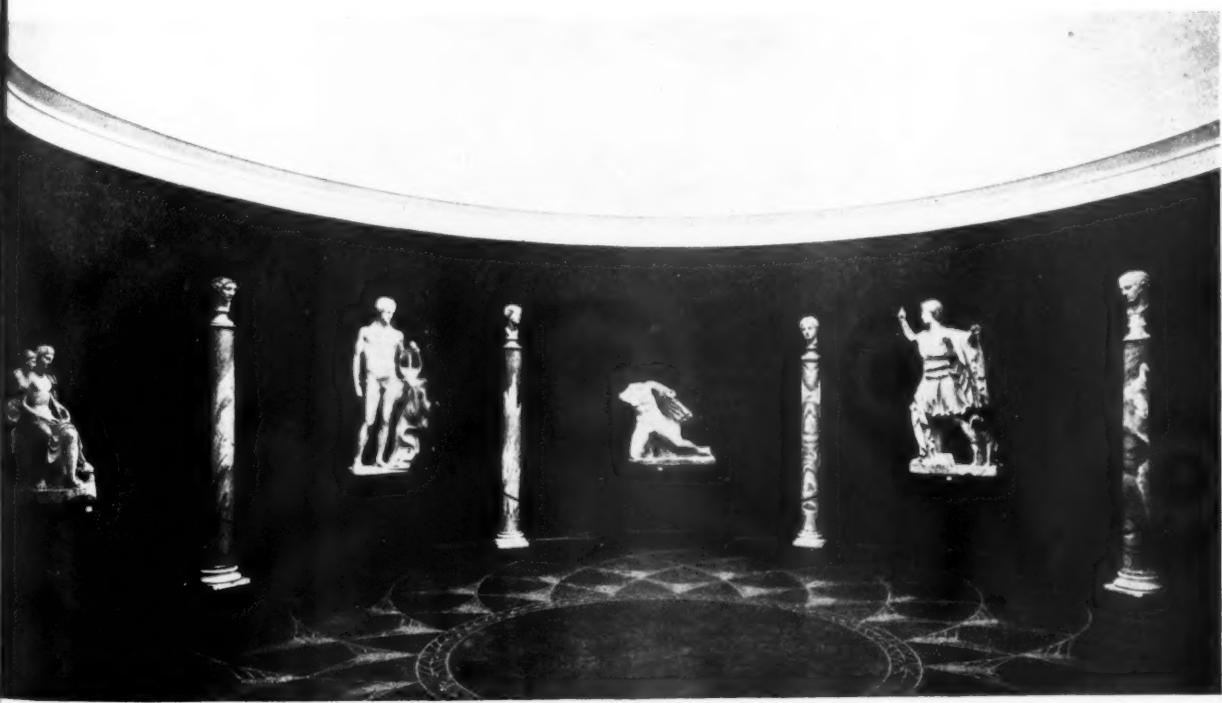


FIG. 23.—NY CARLSBERG GLYPTOTEK, COPENHAGEN. NIOBE HALL

Here is a whole subject. Pausanias records that in the workshop of Phidias at Olympia there was "an altar to all the gods in common." That workshop and altar might be found to-day in a great modern gallery with its studios and workshops.

**NOTE ON AUTHORITIES AND REFERENCES**

Generally this essay attempts to put the author's own observations on specific cases, and his conclusions in front of certain works of art and their settings, noted for his own interest over a number of years. There is little published material on sculpture galleries as such. References are

given in the footnotes to Mr. MacLagan's paper on Museums at the R.I.B.A. 6 June 1931. There is also a Godwin Bursary Essay on Museums by the late Cecil Brewer published in the R.I.B.A. JOURNAL 1913.

A series of notes on the requirements of archaeological students in regard to sculpture galleries is given in the pamphlet by Professors Brazley, Robertson, and Ashmole on the proposed new rooms in the British Museum to take the sculptures of the Parthenon.

The reference to casts in the Final Report, Part II, of the Royal Commission on National Museums and Galleries is given in the footnotes.



FIG. 24.—THE RODIN MUSEUM, HOTEL BIRON  
Setting of the la Penseur in the Sculptor's Studio

## Waterloo Bridge

*The following letter from Dr. Raymond Unwin to the Chairman of the London County Council was published in the general Press on Monday, 22 February:—*

10 February 1932.

ERNEST SANGER, Esq.,

Chairman of the London County Council,  
County Hall, Westminster Bridge, S.E.1.

DEAR SIR,—I wish respectfully to convey to you the opinion which I believe to be general among architects and town planners that the proposal now before your Council to remove Waterloo Bridge and to build a new one, providing for six lines of vehicles, is justified by no sound reasons.

Unfortunately when the Advisory Committee which you invited to consider the Charing Cross Bridge problem met in the summer of 1930, no comprehensive plan for the future development of London, or for dealing with its growing traffic congestion was available, and the Committee had to report: "The absence of Town Planning Schemes in respect of built up areas has prevented us from having the advantage of knowing or considering the conditions likely to apply in the affected areas or of enjoying any assurance as to what development will in fact take place in such areas."

It is but too evident that only on the basis of such a plan could the problems of the bridges and their approaches be properly solved. Certain conclusions relative to the question of Waterloo Bridge were, however, made clear from evidence before the Committee, and may be gathered from the report.

In reference to the present proposals I desire to draw attention particularly to the following considerations:—

1. No widening of Waterloo Bridge will serve the purpose or take the place of the Charing Cross Bridge, whatever may be its ultimate position.

2. The Committee reported that "In the case of Waterloo Bridge the limiting factor is the volume of traffic that can be passed through the Strand intersection."

3. Traffic crosses a bridge without check from standing, stopping, turning or crossing vehicles, which are the main causes of obstruction to free running on roads.

4. Waterloo Bridge at its present width provides running space for more vehicles than could be passed across the Strand without serious delay to east and west traffic.

5. The widening of that bridge to take four lines of vehicles instead of three, may be justified for convenience and safety and for standing space at the ends, rather than for the increase in the number of vehicles which could then cross it.

6. The conditions and space necessary to pass the traffic from a bridge across the Strand were laid down by the traffic experts before the Advisory Committee with definiteness and emphasis;

and provision was made in the adopted scheme at great cost to satisfy them. No similar possibility for satisfying these conditions exists at the Strand crossing from Waterloo Bridge; nor has any practicable means of providing them yet been suggested.

7. The provision of width for six lines of vehicles therefore would be a waste of money, and would do more harm, by increasing congestion in the Strand, than it could do good to the cross river traffic. On the other hand it is, I believe, well known that:—

(a) There is no serious difficulty about underpinning the existing bridge and making it secure.

(b) It can be widened to take four lines of vehicles in more ways than one.

(c) These works can be carried out at a reasonable cost.

(d) On the other hand the removal of Waterloo Bridge would be a very formidable operation. Evidence was given before the Royal Commission in 1926 showing that to remove the existing bridge before building a new one would cost about the same sum as the underpinning and reconditioning of the present bridge, and would take about four and a half years. After the outlay of this money and time there would be a clear sheet of water, but with the existing temporary bridge still standing, with its piers in line with the existing piers and in the way of any fresh spacing, and a new bridge still to be built. In the other case there would be a reconditioned Waterloo Bridge that would stand as long as can be foreseen. Moreover, if the work were done concurrently with the underpinning, the bridge could be widened at the same time by extending the piers to carry four lines of vehicles, at a comparatively small additional expenditure; possibly of the order of £100,000, which it is understood was about the cost of widening London Bridge.

(e) The reconditioning of Waterloo Bridge leaves open for the future the question of a further bridge at Charing Cross or elsewhere.

Under these circumstances it does not appear that any good traffic or other sufficient reason exists to justify the demolition of Waterloo Bridge, and I desire to urge most strongly that the bridge should be reconditioned, for not only can it then be made adequate for the traffic requirements, but such course is equally desirable on the grounds of economy and because it would satisfy the wish, often emphatically expressed on behalf of the nation, for the retention of this great historic monument, architecturally related to Somerset House and recognised as one of the finest stone bridges in the Empire.—Yours faithfully,

(Signed) RAYMOND UNWIN,  
President Royal Institute of  
British Architects.

## Reviews

### ITALIAN ART

STORIA DELL' ARTE ITALIANA. By Adolfo Venturi. Vol. IX: *La Pittura del Cinquecento, Part V.* Milan: Ulrico Hoepli. 1932. £2 2s.

Reviewed by THEODORE FYFE [F.]

In this volume, Prof. Venturi continues his great work with the fifth part of the section dealing with the painting of the fifteenth century. How leisurely and complete is the progress can be judged when we consider that the work of only three painters occupies 250 pages, with a corresponding amount of illustrative material. These three—Sebastiano del Piombo, Jacopo Pontormo, and Domenico Beccafumi—with one other, Baldassare Peruzzi, are the most important in this volume; which deals also with the works of some minor but important groups. Works in the latter category that may be mentioned are the striking monastic dramas by Andrea da Salerno (Figs. 424 and 425), the "Marriage of St. Catherine" by V. Tamagni (Fig. 233) and the lovely little angel playing the guitar, by Rosso (Fig. 115).

Sebastiano del Piombo is well represented at the National Gallery and here we have illustrations of about 40 of his other works, including four which would place him justly as a painter of the first rank—the "Violinist" at Paris, the portraits of "Dorothea" at Berlin, Clement VII at Naples, and Andrea Doria at Rome. The last was exhibited at the recent Italian Exhibition at Burlington House. Prof. Venturi says of it—"Nessun ritratto, forse, in tutto il Cinquecento, si avvicina all'ideale d'eroica grandezza sognato da Michelangelo."

The Cinquecento is famous for the skill shown in compositions for special architectural spaces. The lunettes at the Farnesina by del Piombo are masterly in their ease of handling, but to architects at least, the decorations by Peruzzi in the famous building which he designed are even more fascinating. In the delicious "decoration" of Fig. 220, there is the fresh and intimate association of nature with an exquisite sense of balance in design which recalls the great Ferrara doorway; an inimitable Peruzzi touch.

The cultural value of this wonderful series of volumes is immense, and in the wealth of output from the Cinquecento here illustrated, much of it comparatively unknown, the architect, in a more specialised sense, will be stimulated and refreshed for his work by page after page. The architectural settings for painting, chiefly from Italy but also from France, would alone make this volume specially valuable.

### THE DESIGN OF SMALL BUILDINGS

NOTES ON THE DESIGN OF SMALLER BUILDINGS. Issued by the Winchester Town Planning Architectural Sub-Committee. (City of Winchester (Special areas) and Winchester and District Town Planning Schemes.) Pam. Winchester City Surveyor. [1932.]

Reviewed by E. MAXWELL FRY [A.]

The control of architectural design in buildings commonly coming outside the scope of normal architectural practice is fraught with danger. Small buildings are generally ugly through ignorance and economic pressure. Ignorance can be cured at last by instruction, but the effects of economics can be altered only by a knowledge of the causes, and their manipulation into healthy channels.

This booklet is an effort, the result of much unselfish work

on the part of one man and some lengthy discussion by others to teach the small town builder how to build as architects build who follow tradition and practice good manners.

Its advice, therefore, ignores to a great extent the forces of economic pressure and teaches the ignorant to build in the pleasant ways we have so long followed, reverencing the buildings of our ancestors, using brick, timber and tiles as they were wont to be used, and the substitute materials as substitutes are used by the well-intentioned; the whole tenor pointing to the effect rather than the structure of building.

Now that I see the booklet in print, I realise that much that it advocates is inimical to our less historically biased outlook to-day, but for the purpose for which it is written I realise that it would be impossible to say all that one would wish. Nevertheless not to say what we mean may be dangerous, especially at a time when leadership is called for.

The rather official format, devoid of accompanying illustrations—even simple line blocks—is perhaps a bar to the effectiveness of the book. This should be remembered in a new edition.

### THE NEW "SPECIFICATION"

SPECIFICATION, 1932. F. Chatterton, ed. London: Architectural Press. 1932. 10s. 6d.

Reviewed by T. E. SCOTT [F.]

The current edition of *Specification*, now in its 34th year, fully maintains the very high standard that is expected of this book. It is, in many respects, the most valuable of the many annual publications and, to the average architect in practice, takes the place of an elaborate system of filing of trade circulars and technical data concerning not only traditional, but the most modern of building methods and materials.

For the first time, the publishers appear to appreciate the tremendous value of this book by enclosing it in a cloth binding, an improvement that is fully justified.

No effort has been spared to bring *Specification* up to date, and the appearance of an interesting and valuable new section entitled "The Acoustical Engineer" is typical of the progress that is being made. This section, which occupies thirty pages, is a really comprehensive survey of the subject, including a scientific—but nevertheless understandable—introduction and explanation of terms; tables of useful data, such as the coefficients of various building materials; an explanation of Sabine's formula; and notes on the design of auditoriums. The insulation of sound and vibration is dealt with in separate notes, which include tables showing the insulating properties of many types of partitions and floors. The section concludes with a number of useful specification clauses, and constitutes one of the most authoritative statements available upon the subject.

The thirty sections devoted to the various branches of the building and allied trades contain a tremendous amount of information, each section including standard data, descriptions of materials, details of standard specifications, and typical specification clauses. Much of the information cannot be found in text books, consisting as it does of carefully selected "scraps" of information, clearly and concisely stated and usefully indexed.

Many of these articles have been rewritten to take account of the most recent developments, a typical example being the notes on the "Thermal Storage System of Heating."

As is usual, this year's edition contains five articles on interesting subjects:—"Modern Store Design," by Joseph Emberton, A.R.I.B.A.; "Indirect Artificial Lighting," by a Specialist; "Some Floor Surfaces in General Use," by E. Ewart Aston, L.R.I.B.A.; "The Equipment of the Modern Kitchen," by P. Humphry Wyatt, A.R.I.B.A.; and "Architectural Leadwork," by Edwin Gunn, A.R.I.B.A. All of these show evidence of expert knowledge, and, in common with the other articles contained in *Specification*, they provide, in a very condensed form, as much information as is usually spread out over a number of large volumes. Moreover, *Specification* possesses the unique attribute of being really up-to-date in the light of contemporary experience, a quality which is naturally not to be expected of the usual text book.

As usual, a very large number of advertisements are interleaved with the pages of technical data, but since they are correlated carefully, this would appear to be an advantage rather than otherwise.

While *Specification* cannot take the place of text books it does offer to the student what is possibly the most complete and up-to-date review of materials and methods that is available, and to the architect in practice, a fund of information of the kind that otherwise is only acquired by long experience and tedious enquiry.

## SUPPLEMENTARY LIST OF ACCESSIONS TO THE LIBRARY

### AUSTRALIAN STONES AND TIMBERS

The Technological Museum of Sydney, New South Wales, has presented to the Royal Institute of British Architects a gift of books as under:—

#### SYDNEY: TECHNOLOGICAL MUSEUM.

\*Building and ornamental stones of Australia. By R. T. Baker. (Technical Educational Series, No. 20. New South Wales, Department of Public Instruction.) ob. 7 $\frac{1}{2}$ " x 9 $\frac{1}{2}$ ". 169 pp. — map. [Sydney.] 1915.

The aim of this work is to demonstrate that Australia has an unlimited supply of building and ornamental stones which lend themselves admirably to the purpose of decorative art. Judging from the remarkably fine series of coloured photographs and the information supplied in the letterpress, these claims can be substantiated, while the numerous photographs of buildings illustrating the application of the materials shows that wide use of local resources has been made in the Commonwealth. It may be remembered that displays of Australian building stones have been made at various exhibitions in this country, and that a fine series of New South Wales stones at the Franco-British Exhibition in 1908 aroused considerable interest.

Bulletins (New South Wales, Department of Education). pams. Sydney, N.S.W. : Govt. Printer. 19—.

No. 3. Wood borers damaging timber in Australia. By T. C. Roughley and M. B. Welch. 2nd ed. 9 $\frac{1}{2}$ " x 7 $\frac{1}{2}$ ". 1924.

One of the great problems facing the timber-using industries in Australia is the prevalence of borers. Enquiries have shown that the situation results from laxity on the part of some merchants in supervising the quality of the timber supplied, notably during the War, when large quantities of immature hardwood trees showing a high proportion of sapwood were cut to cope with the scarcity of imported softwoods, which reached excessive prices.

This bulletin, in its first and second editions, was prepared to meet a wide demand for information regarding the pests concerned and methods of coping with them. The publication is an eminently useful one, giving an illustrated account of the chief insects met with and particulars of treatment. The powder post beetle (*Lyctus brunneus*) and the furniture beetle (*Anobium domesticum*) are borers which attack seasoned timbers. Of the

remedies suggested, heat (when it can be applied) is regarded as probably the most positive in its action; a temperature of 114° to 117° F. is sufficient to kill the larvae and french polish is not affected. Other remedies include treatment with creosote, ortho- and para-dichlorbenzene, kerosene and corrosive sub-limate.

The shot hole borers (*Platypus* and *Xyleborus*) attack timbers during seasoning: they do not affect seasoned wood and cannot live in such material. The only effective treatment so far tried is stated to be steaming in a steam box, which effectively kills the pests but does not render timber immune from attack. Long lists of Australian and other timbers subject to the pests are given.

No. 9. Notes on the structure of wood. By M. B. Welch.

9 $\frac{1}{2}$ " x 7 $\frac{1}{2}$ ". 1924.

This is an excellent description of the various structures which give wood its strength and durability. It is illustrated with microscopic sections of eight different specimens of wood, with clear descriptions of the sections. It should be noted that there are no true pines indigenous in Australia. The trees popularly so-called do not belong to the genus *Pinus*, but, as in the case of the well-known hoop pine, cypress pine and huon pine, belong to entirely different genera from the sugar pine and yellow pine. The names, however, are familiar in Australia and elsewhere through popular usage, and they are correct in so far as they indicate that the timbers belong to the conifers, although some of the so-called "pines," e.g., species of *Podocarpus*, are not cone-bearing trees.

No. 12. Tung oil (Chinese wood oil) from Australian grown trees of *Aleurites Fordii* (Hemsley). By A. R. Penfold and F. R. Morrison.

Revised ed. 9 $\frac{1}{2}$ " x 6 $\frac{1}{2}$ ". 1931. 18.

Tung oil (Chinese wood oil) is expressed from the seeds of *Aleurites* spp., chiefly *Aleurites Fordii*, a tree which in China attains a height of 10-30 feet and a diameter of 6-10 inches. The oil, which has been used for centuries in China as a waterproofing material, is widely employed in industry as a very important raw material for the manufacture of waterproof paints, enamels and varnishes, and is also used to a considerable extent for making rubber substitutes, linoleum and cellulose lacquers. For many years commercial supplies (which have been absorbed notably by the United States, which imports about 10,000,000 gallons of the oil annually) have been obtained from China (chiefly from wild trees) but strong efforts are now being made to cultivate the tree in suitable countries throughout the world. The most important work has been done in Florida, where there are large plantations of the trees; and, through the action of the Imperial Institute, the Royal Botanic Gardens, Kew, the Research Association of the British Paint, Colour and Varnish Manufacturers, much attention is now being given to the question in the British Empire.

The present bulletin is concerned with the efforts being made in this direction in Australia. Full cultural instructions for raising the tree from seed are given and the results to date of planting experiments in the Commonwealth are described.

No. 13. Notes on the strength of timbers. By M. B. Welch.

8" x 5 $\frac{1}{2}$ ". 1929. 18.

This is a useful book with a list of transverse tests on specimens in the Technological Museum of Sydney. The earliest tests were made on small specimens 3" x 3" x 36" span, central loading, but more recently the standard size of 2" x 2" x 28" span has been adopted in accordance with the practice set out in Project No. 1 of the Forest Products Research Laboratory, Princes Risborough.

The modulus of rupture is considered to be the stress in the outer fibres at the breaking point; this figure is commonly employed in practice as a criterion of strength of the material, but the strength at the elastic limit should actually be more useful to indicate the maximum safe permanent load.

The formula used in calculating the modulus of rupture is only strictly applicable to material for stresses under the elastic limit, but in timber it is assumed that the modulus of rupture does not differ very much from the extreme fibre stress.

The strength of timber is largely influenced by the rate of growth of the tree, and this is indicated by more or less defined "growth rings" which in cold climates, *e.g.*, at high latitudes or altitudes, are annual, but in most tropical and sub-tropical woods are ill-defined and may not be annual.

A typical "growth ring" consists of two parts, a lighter coloured portion consisting of comparatively thin-walled cells and known as "spring" or "early wood," and a denser, thicker walled zone called the "summer," "autumn" or "late wood." It is obvious that the thicker walled cells give greater strength than those with thin walls, and, therefore, one of the important indications of the strength of a timber, such as Oregon, is the relative proportion of late and early wood.

The best grade Oregon is that which has not less than six growth rings per inch and not less than 33 per cent. of late wood in the growth rings.

A wood in which the principal woody element runs parallel to the longitudinal direction is said to be straight grained.

"Cross grain" is a defect commonly found in sawn timber, due to the sawing not being parallel to the direction of growth, and is often due to deviations of the tissues by large knots or by cutting crooked logs. The greater the deviation the weaker the timber; a maximum deviation of about 1 in. in 15 in. is permissible in structural timbers.

Technical Education Series (N.S.W., Department of Public Instruction). Sydney: Govt. Printer, 1919.

No. 16. A research on the pines of Australia. By R. T. Baker and H. G. Smith. 12" x 9 $\frac{1}{2}$ ". Prelim. + 438 pp. + maps. 1910.

This well-known work is a scientific study of the trees belonging to the conifera which occur in Australia, full attention being given to the economic products obtained or obtainable from them. It is remarkable that none of the softwood trees indigenous in Australia are true pines, *i.e.*, species of the genus *Pinus*. The book opens with a short statement of Australian coniferae and is followed by a systematic account of the genera concerned, each species of tree being dealt with in detail. The method adopted is to describe the species in respect of their history, anatomy, botanical sequence, chemistry and economic application, the text being freely illustrated by coloured and other photographs. The appendixes comprise a table showing the

distribution of pines in Australia, and a discussion of the systematic value of the chemical products of plants as an aid to their botanical study. There are also several maps in the volume.

No. 18. Cabinet timbers of Australia. By R. T. Baker.

ob. 7 $\frac{1}{2}$ " x 9 $\frac{1}{2}$ ". 186 pp. + pls. 1913.

This beautifully illustrated volume gives photographs in colour of the specimens of cabinet timbers grown in Australia. Its purpose is primarily to give information to the trade concerning the specific characteristics of the respective woods that may be classed as suitable for cabinet-making. It also contains particulars of the approximate localities where the trees are to be found and a botanical description of each species. The coloured photographs are among the most successful representations of timber that have been produced, and they are the outstanding feature of the work. There are also plain photographs of furniture, panelling and other articles made from selected timbers which indicate their suitability for the respective uses.

No. 23. The hardwoods of Australia and their economics. By R. T. Baker. 12" x 9 $\frac{1}{2}$ ". xvi + 522 pp. + pls. 1916. 20s.

Since its publication in 1919 this book has been the standard work of reference on the hardwoods of Australia. It was written with the object of arousing interest in the large number of valuable timbers of that class which form probably nine-tenths of the timbers produced by the Commonwealth, and much of the consideration which is now being given to the industrial utilisation of these woods in England and elsewhere may be traced to the attention drawn to them by the scientific and practical information which has been disseminated by this volume. Part I, which is written more especially for the student, deals with the physical properties of timber. Part II, which comprises the greater part of the book, is concerned with a description of each hardwood species arranged in botanical sequence, the information including a practical account of the wood, a description of its uses, and a statement of systematic (botanical) features. Each wood is excellently illustrated by a realistic coloured plate. In Part III the author gives full information regarding the technical application of the timbers arranged according to specified uses. There are many black and white illustrations.

—Notes by H. D. Searles-Wood [F.]

## New International Standard of Inadequacy in Daylight Illumination

At the Triennial Plenary Meeting of the International Commission on Illumination held at Cambridge in September last the following resolutions were agreed by the technical delegates of the 16 countries represented on the Commission.

1. It is recommended that in general the use of contour lines of constant daylight factor (iso-daylight factor lines) be adopted as a convenient method of considering daylight illumination in all questions affecting the disposition, adequacy and efficiency of the lighting of interiors by means of daylight.

2. It is recommended that at all parts of interiors where the daylight factor at table height (85 cms.) is less than 0.2 per cent., the daylight shall be regarded as definitely inadequate for work involving visual discrimination over reasonable periods of time and comparable

with ordinary writing. This is not recommended as a standard of adequate intensity of illumination.

3. It is recommended that National Committees bring the above resolutions to the notice of the architectural and medical organisations and also the authorities responsible for the framing of building regulations in their respective countries.

The Report of the British National Committee, which has been appointed to organise, as Secretariat, international research on the subject of daylight at the triennial meeting at Bellagio in 1925 was also adopted.

The British Report which together with an explanatory paper presented to the Congress by the British National Committee deals with the subject in considerable detail is too long for reproduction. The following note on the subject has therefore been prepared, at the

request of the Science Standing Committee, by Mr. P. J. Waldram, the representative of the R.I.B.A. on the British National Committee.

The Royal Institute is no longer isolated in its advocacy of the conservation of such light, air and sun as remains in our overbuilt towns.

Within the last few years a most remarkable and even revolutionary change has taken place in all countries in the public appreciation of the value of light and air; which has already affected public opinion with regard to the permissible height and density of buildings in towns and bids fair to change it completely.

The old fetish that everything, even public health, must of necessity be sacrificed to any demands, however extravagant, made in the nominal interest of business and industrial convenience is rapidly giving place to a more sane appreciation of real values.

Those who have in the past preached, in season and out of season, the doctrine of high buildings as the orthodox means of commercial salvation, find their arguments criticised, and even their motives questioned.

Not only is it realised that demands for greater and greater concentration tend to defeat their own object by intensifying traffic congestion, but it is also appreciated that in many cases such demands are merely a specious cloak for the real object of concentrating the utmost rental value on to town sites for the sole purpose of enriching a few lucky individuals.

The cause of this sudden change is not far to seek. The marvellous cures of disease in Alpine Sanatoria by mere exposure of ailing bodies to light and sun, and the even more miraculous results of irradiation in climates like our own, where some 60 per cent. of possible sun is lost behind clouds, has aroused the enthusiasm of medical practitioners and through them of the public at large.

Those who have experienced in their own persons the effects of nature's free restoratives, light, air, and sun, are no longer content to submit to perpetual twilight or to artificial light all day and every day.

Business men are seizing every opportunity of migrating from narrow overbuilt streets in crowded central areas to offices where their clerks and typists, no less than themselves and their departmental managers, can work in natural light and air and enjoy such sun as our climate affords.

Offices whose only aspect is the miserably inefficient hole miscalled a "light" will no longer command high rentals. It is increasingly difficult to let them at all.

Architects have not been slow to sense the new feeling. In one of the latest buildings to secure the London Architecture Medal, the Underground Railway Offices at St. James's Park, some possible lettable floor space was sacrificed in order to bring the customary internal light wells to the outside, resulting in a cruciform plan with every room well lit and no neighbouring buildings materially obstructed. In one of the latest blocks of residential flats, Crofton Court, Sir Giles Scott has sacrificed even the orthodox flat façade in order to secure the maximum of light and sun. On the Continent, the cult is even more marked and is well epitomised in Corbusier's arresting phrase "Je dessin avec la lumière."

The whole world is of course merely reverting to the wise common sense of the ancient Greeks and Romans. The former vigorously practised heliotherapy or sunbathing not only as a cure for disease but as a tonic for athletes; whilst the latter, appreciating the danger of a C3 working-class, enforced laws

protecting a sufficiency of light even on sunny shores of the Mediterranean.

Recorded legal decision under the Roman law of light in Pompeii B.C. 4, in Byzantium A.D. 800, and in England A.D. 1600 are characterised by a severity in comparison with which decisions under our modern law are mildness itself.

Those who consider the Prescription Act to be a mere piece of fussy grandmotherly legislation might note with advantage that in the case of Maurice v. Baker 1617 it was found necessary to lay down the rule that the *undoubted right* of an aggrieved person to enter upon the land of his neighbour, to pull down a wall affecting his light, and to destroy the foundations, must not be exercised *until* the nuisance had actually been caused.

The Roman law of light, which we have inherited, protected light as a personal property. In times when its invaluable properties were universally appreciated this doubtless served to protect the interests of the community quite as effectively as any form of restrictive building regulation. Possibly more so, for the problem of "quis custodiet" is not new. But when class civilisation was overwhelmed by the flood of barbarism, the science of heliotherapy was lost and forgotten, or discarded medically in favour of semi-superstitious nostrums, and later of vegetable and mineral drugs.

During the constant warfare of the Middle Ages the security essential to the growth of prosperous centres of commercial and industrial activity could often only be found in walled towns.

The development and expansion of industry promoted by the city walls practically enforced higher and higher buildings and the utilisation of open spaces, and overcrowding came to be regarded as an inevitable feature of urban life.

The Roman law of light either fell into desuetude or where it survived, as in England, was often abrogated by mutual consent between property owners to whom light meant little or nothing or at most a commodity which they could sell at a comfortable or even extortionate figure.

Even when modern artillery and more settled conditions rendered obsolete the old constricting ring of fortifications the habits of centuries has died hard.

Although business men and artisans have gradually given up the habit of living over their warehouses, their shops and their workrooms, and have adopted the amenities of suburban life for their families they have long been content to spend their own working lives in stuffy gloom and to consider such conditions to be inevitable.

The conventions which decree that certain professional and business activities should be carried on in the centre of towns and even insist that those who aspire to prominence must be housed in particular streets are, in these days of rapid telephonic and postal facilities and speedy transport, based far more upon tradition than upon actual convenience. But unfortunately, although obsolete, they still operate powerfully, and the ever-increasing demand for lettable floor space upon sites favourably situated has long presented an irresistible temptation to their owners when faced with the prospect of a heavy obstruction to barter away their legal rights for permission to darken their neighbours windows themselves at some later date.

There are so many of such reciprocal agreements in existence binding future owners in perpetuity that in all probability the time has gone by when the old personal Roman law can be trusted to protect the community even when aided by the most complete awakening of public opinion.

Even though a property owner may (as every property owner should) regard himself merely as a temporary trustee,

morally bound to do nothing and to permit nothing which would affect the thousands who will occupy both his premises and his neighbours' in future years, long after all interests in both have passed, by death or by sale, into other hands, he is tied all too frequently by agreements entered into by some selfish predecessor in title.

Until such reciprocal agreements are rendered illegal—as the Prescription Act rendered illegal the precisely similar “custom” of London and other towns enabling everyone to build as they pleased, the community at large can only be protected by restrictive regulations.

When the British National Committee was first constituted in 1925 after the triennial meeting of the Commission at Bellagio, it consisted of representatives of H.M. Office of Works, the Ministry of Health, the Dept. of Scientific and Industrial Research and the National Physical Laboratory. At the instance of the writer, the R.I.B.A. was added to these bodies. Mr. Alan Munby being appointed by the then President, Mr. Walter Tapper. He was succeeded by Dr. Unwin, who had previously represented the Ministry of Health, and, later by the writer, from whom Dr. Unwin took over representation of the D.S.I.R.

The Council R.I.B.A. has therefore been in touch with the British National Committee from the first, and its representative was one of the two British delegates to the triennial Commission meeting at Cambridge.

Throughout the whole period of six years during which the British Committee has collaborated with national committees and experts on the subject in other countries, co-ordinating and circulating their researches as Secretariat, it has adhered to the policy of securing agreement as to general data and the simpler methods and practical approximations applicable to general problems, such as would enable authorities responsible for building regulations and public health to arrive at broad decisions with the maximum of information as to their effect and the minimum of labour. But this was carried on *pari passu* with agreement upon the more exact, but more tedious methods applicable to the determination of border-line problems.

The methods and standards which have gradually been evolved and perfected in this country in connection with disputes as to light were not even suggested to other countries until they had survived long and rigorous tests by H.M. Office of Works and the National Physical Laboratory, the results of which were published by H.M. Stationery Office (Technical Papers Nos. 7, 10, 11 and 12, Illumination Research, D.S.I.R.).

During the period of such testing, enquiry was made as to alternative methods used or suggested in other countries, and it was not until all such possible alternatives had been examined and found wanting that the British methods and data were put forward with due proofs of their accuracy and practicability. They are epitomised in the resolutions unanimously adopted at U.S.A. and at Cambridge, but the British Report which was adopted with them also describes simple approximations sufficiently accurate for simple general problems; and a paper (The Provision of Daylight in Building Regulations) presented by the British National Committee at Glasgow to the Congress which preceded the Commission proper illustrated a number of practical problems worked out both approximately and in precise detail.

The general basis of the approximate method of attacking the simple general problems to which building regulations would probably be limited, such as the permissible height of buildings in streets of different widths, the proportions of light wells, etc., is quite simple. It is based on the observed fact

pointed out in the British Report, and also in Technical Paper No. 7 (supra), that in cases of obstruction sufficiently severe to require limitation and caused by level obstructions extending across the aspect of windows, the agreed limit of inadequacy (0.2 per cent. daylight factor) may, for all practical purposes, be considered as identical in position with the limit of penetration of direct light usually known as the "no-sky line." As the latter can be ascertained in such cases by lines drawn from the top of the obstructions through the tops of window openings opposite and continued down to table height, the rooms lit by windows facing such continuous level obstructions are divided at once into two portions, one of which is inadequately lit and the other adequately lit.

The effect of any given permissible degree of continuous unbroken obstruction can, therefore, conveniently be expressed in terms of the percentage proportions of the area of rooms at different floor levels which will by it be rendered inadequately lit. But to secure useful and comparable results, it is obviously necessary to consider the effect of different degrees of obstructions upon some standard section indicating floor heights, room depths and fenestration which would represent a reasonable average of architectural practice in modern buildings.

Regulations which attempted to secure adequate lighting behind unduly low window heads or to unduly deep rooms would require impossibly low standards of permissible building heights; whilst regulations based upon abnormally generous

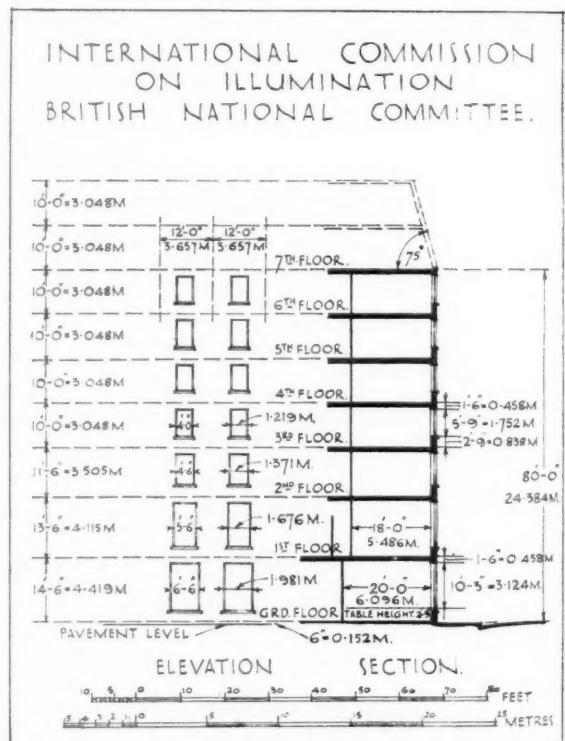


FIG. 1.

fencstration would leave large numbers of reasonable buildings inadequately protected.

The R.I.B.A. was requested to supply such a typical section to represent average modern architectural practice in town buildings as a guide to other countries in the preparation of similar sections typical of their individual practice.

The Science Standing Committee published a suggested section in the JOURNAL 12 April 1930, and invited comments and criticisms. The latter were collated and considered, and the proposed section was slightly modified. It is reproduced in the report with British and metric dimensions. (Fig. 1.)

The operation of setting up in front of such a section points representing the height and distance of the top of various obstructions gives interesting and rather unexpected results.

It will be found for example that a building height of 50 feet in a street 50 feet between buildings, creates a far larger proportion of inadequacy than say a height of 30 feet in a street only 30 feet wide, and far less than a height of 70 feet in a street 70 feet wide. The reason is that the window heights do not vary in scale with varying widths of street. In so far as slightly lower floor heights may be expected in narrow streets and slightly higher in very wide streets, these differences are modified.

One would expect from this that it would be possible to fix upon a standard moderate street say 50 feet between buildings and to find some practical equivalents having a similar effect for narrower or wider streets. But immediately this is tried one is met by the fact that equivalent heights which would secure equality of injury to ground floor rooms differ in their effect upon the rooms of upper floors, and that these differences vary from floor to floor, as well as with different street widths.

For example, if the lighting conditions in a street 50 feet wide between buildings 50 feet high, as taken as a standard, then the building heights which would secure equal lighting conditions to ground floor rooms in streets 25 feet and 100 feet wide would be 31 feet 9 inches and 86 feet 3 inches respectively. To secure equal lighting conditions to first floor rooms, the limiting heights would require to be 38 feet 6 inches and 73 feet; whereas if the lighting of second floor rooms were the criterion, then heights of 44 feet 3 inches and 61 feet 9 inches would be required.

Regulations intended to restrict excessive obstruction to

light by defining a given ratio of height to distance such as a permissible height of buildings in a street equal to the width between buildings, or that width multiplied by 1½, 2, 0.5, or any other fixed ratio would therefore secure a greater proportion of adequately lit floor space in rooms fronting narrow street, and proportionately less light in the wide streets.

Regulations could doubtless be devised to secure approximately equal lighting conditions to say all properly designed ground floor rooms, the upper floors being disregarded as being safeguarded by the protection given to the ground floors.

For instance, a regulation might be framed which decreed that no ground floor having window heads at the standard height, should be left with less light than it would have if situated in a street 50 feet wide between buildings with a building height opposite of 50, 75, 100 or 30 feet, or any other fixed figure. Any such regulation would permit relatively high buildings in narrow streets, decidedly high buildings at street intersections and virtual skyscrapers fronting permanent open spaces. But in the restriction of overbuilding in the interests of health, light is not the only consideration; ventilation is equally important, and in connection with air circulation in towns open spaces and street intersections are of the utmost importance. It is quite logical to secure a little more light in narrow streets than is found to be necessary in wider and more airy thoroughfares.

These considerations indicate sharply the defects of the individualistic Roman law. The owners of corner sites at street intersections might be able to build to great heights without causing actionable injury to any neighbours, but thereby largely stagnating the air along entire streets. It requires a communal building law to prevent them from doing so.

Opinions may differ as to the merits or demerits of any given regulation, but there can at least be now no excuse for any ignorance as to the facts which has so long characterised public opinion in all countries.

The leading part taken by this country in the matter is, of course, only to be expected. Had other countries been forced by similar climate, similar law and similar concentration of town buildings by intense industrial activity to study the subject as closely, they might easily have produced a similarly complete and possibly a better technique in a shorter time.

## Architects' Unemployment Relief Fund

The Architects' Unemployment Committee are glad to be able to publish a further list of donors and subscribers to the Unemployment Relief Fund. This is the fifth list that has been printed in the JOURNAL since the beginning of the scheme, and the Committee's thanks are due to all those who have so generously given their support. Subscriptions have been received both from London and the Provinces from architects in private practice and from architects in Government and Municipal employment and from the Allied Societies. The Committee would like to mention again the action of the York and East Yorkshire Society who cancelled their Annual Dinner and sent the amount to the Unemployment Fund. Acknowledgment has already been made to the Society, but it may be in order to thank them once more for their most acceptable gift of £47.

Cheques should be made payable to the Architects' Unemployment Committee and sent to the Secretary, the Architects' Unemployment Committee, 9 Conduit Street, W.1.

The following have joined the scheme as subscribers:—

Messrs. Val Myer and Watson-Hart; Mr. J. W. Denington; Mr. A. W. Willis; Mr. H. R. Thompson; Mr. H. M. Pesket; Mr. C. Nicholson.

Sir John Burnet, Tait and Lorne; Mr. A. D. Bryce; Mr. L. G. Farquhar; Mr. J. H. Wallace; Mr. S. C. Kirby; Mr. W. Ferguson; Mr. F. E. B. MacManus; Mr. O. A. Bayne; Mr. L. Liscome; Mr. F. Stengelhofen.

Messrs. Caroe and Passmore; Mr. A. D. R. Caroe; Mr. A. P. Robinson; Mr. T. Carr.

Messrs. John Seely and Paul Paget; Mr. J. P. Shannon.

The Architectural Staff of H.M. Office of Works.  
Birmingham Education Committee (Architects' Department); Mr. N. Wigzell; Mr. D. L. Tague; Mr. A. D. A. Haskins; Mr. T. W. East; Mr. H. A. Bull; Mr. J. S. Sawyer.

The London Staff of the Architects' Department of the Co-Operative Wholesale Society, Ltd.

Mr. E. A. Boyle; Mr. C. F. Daffee; Mr. H. Percy Gordon; Mr. H. C. Hughes; Mr. A. J. Johnson; Mr. F. J. Maynard; Mr. John Pym; Mr. A. E. Steevens.

The following donations have also been received:—

Messrs. William G. Newton and Partners, £40; Sir Charles Nicholson, £25; Mr. H. S. Goodhart-Rendel, £25; The Cambridge Architects' Club, £10 10s.; The Association of Architects, Surveyors and Technical Assistants, £10 10s. (second donation); The Wilts and Dorset Society, £10; £5 5s. from Messrs. Bomer and Gibbs, Messrs. G. Elkington and Son, Messrs. Spalding and Myers, and Mr. E. J. Hamilton; £5 from Mr. Ronald P. Jones, Mr. A. E. Powles and Mr. Albert J. Thomas; £4 4s. from Mr. John Creese and Mr. J. Herbert Pearson; £3 3s. from Mr. Albert E. Cockerell; £3 from Miss M. V. Duffell; £2 2s. from Mr. F. H. Floyd, Mr. Graham C. Awdry, Mr. Walter Brand, Messrs. Walter Brand and K. Drew

Edwards, Mr. Mole, Mr. Kean and Mr. Banks; £1 1s. from Mr. Frederick Barber, Mr. P. W. Barnett, Mr. G. T. Bassett, Mr. John A. Herp, Mr. F. J. Humphry, Mr. F. L. Jackman, Mr. W. S. Jones, Mr. P. E. C. Lain, Mr. L. Gordon Lunan, Mr. W. H. Ross, Mr. W. H. Burnett, Mr. William Fenn and Mr. Andrew Gray; £1 from Mr. John Greenidge; 10s. 6d. from Mr. J. Hutchings; 5s. from Mr. R. Tilsley Green.

The following names of Staff have been received since the publication of the last list: Mr. A. J. Butcher; Mr. A. N. Aylwin; Mr. J. V. Hibbert, Police Architect and Surveyor's Department; Mr. L. W. Edmonds.

## Correspondence

FROM MR. C. F. A. VOYSEY  
73 St. James's Street, S.W.1.  
27 February 1932.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—A letter from a Swiss firm of publishers has been widely circulated especially in our profession, asking for subscriptions for the publication of a book on my work. The letter (which I

saw for the first time long after it had been circulated) states that I authorised its issue. I beg for your kind assistance and space to say that it is *entirely untrue*, and that the very thought of such conduct on my part is most abhorrent to your obedient servant,

C. F. ANNESLEY VOYSEY.

## Notes

SIR HERBERT BAKER, R.A.

The congratulations of Members of the Institute will be cordially extended to Sir Herbert Baker [F.], on his recent election as a Royal Academician.

### THE PRESIDENT'S ENGAGEMENTS

The President attended the Annual Dinner of Institution of Civil Engineers on 2 March 1932 and will be attending the following dinners in the near future:

- 8 March 1932. Annual Dinner of the Chartered Surveyors' Institution.
- 5 April 1932. Annual Dinner of the Berks, Bucks and Oxon Architectural Association.
- 9 April 1932. Annual Dinner of the Essex, Cambridge and Hertfordshire Society of Architects.
- 12 April 1932. Annual Dinner of the Institute of Builders.
- 16 April 1932. Annual Dinner of the Association of Architects, Surveyors and Technical Assistants.

### EXHIBITION OF ARCHITECTURAL WORK BY PAST STUDENTS OF THE A.A.

The A.A. has borrowed the R.I.B.A. Galleries from 8 March until 24 March and are holding an exhibition of work designed and built by students and staff connected with the A.A. School since the War. This is the first time the A.A. has held such an exhibition, and it will be of special interest in showing what effect the school training has had.

Buildings of great variety will be exhibited, not only from Great Britain but from all parts of the Empire. The exhibition will be opened in the afternoon of 8 March at 3 o'clock by the Hon. Anthony Asquith, and members of the R.I.B.A. are invited to attend.

### THE ASSOCIATESHIP OF THE R.I.B.A. THE OFFICE EXPERIENCE REQUIREMENT

The Council has decided that, owing to the present economic depression, the normal regulation requiring candidates for the Associateship to submit evidences of at least 12 months' office experience shall be waived for a period of twelve months. Accordingly, the Associateship of the R.I.B.A. shall not be withheld through inability to obtain office experience. Evidence of this inability should take the form of a letter submitted by the applicant.

### ROME SCHOLARSHIP IN ARCHITECTURE, 1932

The Faculty of Architecture of the British School at Rome has admitted the following candidates to the competition for the Rome Scholarship in Architecture, 1932:—

J. Patterson and Basil Spence, of the School of Architecture, Edinburgh College of Art; H. F. Howard, of the Royal Academy Architectural School; and S. G. S. Fidler, R. J. Gardner-Medwin, A. H. Hope, R. P. S. Hubbard, H. J. Lake, N. S. Lunn, R. V. Smith, and D. Winston, of the School of Architecture, Liverpool University.

### CORRECTION

In the issue of 23 January by an unfortunate transposition the plans of the Alfred Bossom designs on pages 226 and 227 were shown in conjunction with the wrong elevations. Mr. Valder's winning plan is on p. 227 and Mr. Cosh's plan on p. 226.

### R.I.B.A. ARCHITECTURE MEDALS

The following Allied Societies have recently decided to accept the offer of the R.I.B.A. Council to provide medals and diplomas for buildings of outstanding merit in their areas:—

Berks, Bucks and Oxon Architectural Association.  
Essex, Cambridge and Hertfordshire Society of Architects.  
Nottingham, Derby and Lincoln Architectural Society.  
Sheffield, South Yorkshire and District Society of Architects and Surveyors.

West Yorkshire Society of Architects.

The conditions upon which the medals are to be awarded are

similar to those which govern the award of the R.I.B.A. London Architecture Medal, except that they will be given triennially and not annually.

The Council of the R.I.B.A. have nominated the following members to represent them on the Juries appointed to make the awards:—

Berks, Bucks and Oxon Architectural Association, Mr. Edward Maufer, M.A. [F.]

Essex, Cambridge and Hertfordshire Society of Architects, Mr. H. S. Goodhart-Rendel [F.]

Nottingham, Derby and Lincoln Architectural Society, Mr. H. T. Buckland [F.]

Sheffield, South Yorkshire and District Society of Architects and Surveyors, Mr. J. C. Procter, M.C. [F.]

West Yorkshire Society of Architects, Sir Edwin Cooper, A.R.A. [F.]

#### NOTES FROM THE MINUTES OF THE COUNCIL

1 February 1932

#### THE ROYAL GOLD MEDAL

Dr. H. P. Berlage was formally elected as Royal Gold Medallist 1932.

#### THE TOWN AND COUNTRY PLANNING BILL

On the recommendation of the Town Planning and Housing Committee, a letter was sent to the Prime Minister expressing appreciation of the fact that the Town and Country Planning Bill is to go forward this Session.

#### THE FELLOWSHIP

The Council, by a unanimous vote, elected the following architects to the Fellowship under the powers defined in the Supplemental Charter of 1925:—

Mr. Alcide Chaussé, Hon. Secretary, Royal Architectural Institute of Canada.

Mr. E. I. Barott, President of the Province of Quebec Association of Architects.

#### REINSTATEMENT

The following ex-member was reinstated:—

As Licentiate : William Henry Bailey.

#### TRANSFER TO THE RETIRED MEMBERS' CLASS

The following members were transferred to the Retired Members' Class:—

#### As Retired Fellows

Allsop : George Wilfred [A. 1902] [F. 1913].

Beckett : John Herbert [A. 1892] [F. 1927].

Palmer : Henry William Hetherington [F. 1907].

Moore : Arthur Henry [A. 1892] [F. 1919].

#### As Retired Associates

Collins : Henry Albert [A. 1898].

Groome : Arthur Reginald [A. 1900].

Spackman : Adrian Elmy [A. 1891].

Tedman : Arthur [A. 1907].

Wood : Edgar [A. 1885].

#### As Retired Licentiates

Ballard : William Joseph [L. 1910].

Evill : Alfred Edward [L. 1925].

Featherstone : Henry Whitehead [L. 1911].

Saxty : Herbert Reginald [L. 1912].

Winn : Joseph Harrison [L. 1911].

#### RESIGNATIONS

The following resignations were accepted with regret:—

Bowden : James Albert [F.]

## Allied Societies

### ROYAL INSTITUTE OF ARCHITECTS OF IRELAND

#### ANNUAL REPORT

The 92nd Annual Report of this Institute was recently submitted by the Council.

Much interesting and encouraging information was given regarding the membership, General and Council Meetings, Examinations, Education, etc. With reference to the latter, the Council has con-

tinued to take an active interest in the School of Architecture, in which there are now 32 whole-time students. During the year, the architecture and art museum in University College was completed; this houses an excellent collection of models of architecture of all ages, photographs, statuary, etc., and is one of the finest collections connected with any school of Architecture in the British Isles.

The chief event of the year was the invitation by the President,

Hardwick-Terry : Edward [F.]

Kemp : William James, Senr. [F.]

Bewes : Anstis George [A.]

Carr : Gerald Mosman, M.B.E. [A.]

Derry : Douglas Charles Lawford [A.]

Edwards : Alfred Hewlett [A.]

Fildes : Geoffrey Philip [A.]

Francis : Cecil William [A.]

Leahy : William James [A.]

Monier-Williams : Stanley Faithfull, F.S.I. [A.]

Browning : Harry Le Cronier [L.]

Hindmarch : John G. [L.]

Pollock : Douglas Warren [L.]

Sanderson : Bertie [L.]

#### EXAMINATIONS

The Board reported the results of the Final and Special Examinations and the Examination in Professional Practice for Students of Recognised Schools exempted from the Final Examination, held at Sydney, Montreal, New York and Toronto.

#### APPOINTMENT OF EXAMINERS

On the recommendation of the Board of Architectural Education, the Examiners were appointed for the year ending 31 December 1932.

#### R.I.B.A. GRANT FOR LIBRARIES

The Board reported that the grant of £50 for Libraries of Schools of Architecture for the year 1931 had been allocated as follows:—

The School of Architecture, Leeds College of Art, £20.

The R.W.A. School of Architecture, Bristol, £20.

The School of Architecture, Armstrong College, Newcastle-upon-Tyne, £10.

#### HENRY L. FLORENCE BURSARY

The Council approved the scheme prepared by the Board for the proposed Bursary generously founded by Mr. H. S. E. Vandepart as a memorial to the late Mr. Henry L. Florence.

THE NATIONAL SOCIETY OF ART MASTERS. ADDITIONAL REPRESENTATION ON THE BOARD OF ARCHITECTURAL EDUCATION

On the recommendation of the Board, it was decided to invite the National Society of Art Masters to nominate annually two representatives to serve on the Board instead of one representative as at present.

#### THE BRITISH SCIENCE GUILD

On the recommendation of the Science Standing Committee, it was decided to make a donation of £5 to the funds of the British Science Guild and to appoint the following members to serve on the Parliamentary Committee of the Guild:—

Mr. A. H. Barnes [F.]

Mr. S. Pointon Taylor [F.]

#### SLUM CLEARANCE AND RE-PLANNING

The following additional members were appointed to serve on the Slum Clearance and Re-planning Committee:—

Mr. A. Llewellyn Smith,

Mr. G. E. S. Streatfield [F.]

Mr. R. Minton Taylor [F.]

Mr. Herbert A. Welch [F.]

#### IMPERIAL INSTITUTE ADVISORY COMMITTEE ON TIMBERS

The following members were nominated to represent the R.I.B.A. on the Imperial Institute Advisory Committee on Timbers for the three years beginning 1 January 1932:—

Mr. H. D. Scarles-Wood [F.]

Mr. Digby L. Solomon [F.]

Mr. A. H. Barnes [F.]

Mr. F. G. Hicks [F.], and the acceptance by the R.I.B.A., to hold the Annual Architects' Conference in Dublin. The Conference, which began on 17 June, was a complete success, and the R.I.B.A. Council passed a cordial vote of thanks to the President, Council and Conference Committee of the I.A.I. for having organised and carried out the arrangements to such good effect. The Council, in turn, recorded its appreciation of the services rendered by Mr. Harry Allberry [F.], who acted as Hon. Secretary to the Executive Committee, and to whom a great measure of the success of the Conference is due.

The Council, after receiving deputations from the Master Builders' Association and the Trade Unions, decided that they could not usefully intervene in the dispute in the building trade, but it is believed that the discussion which took place helped towards the promotion of a settlement.

The Report further dealt with the activities of the various Committees of the Institute and the Library.

Mr. George F. Beckett was elected President for the next triennial period, and Mr. W. H. Howard Cooke [A.], Hon. Treasurer. Mr. F. G. Hicks, the retiring President, was again elected to represent the I.A.I. on the R.I.B.A. Council and the Allied Societies Conference, and Professor R. M. Butler [F.] was re-elected as the Institute's representative on the R.I.B.A. Board of Education.

#### SHEFFIELD, SOUTH YORKSHIRE AND DISTRICT SOCIETY OF ARCHITECTS AND SURVEYORS

Mr. Herbert J. Rowse, [F.], who gave a lecture to this Society on 14 January, on the New Headquarters Building for Martin Bank, Ltd., in Liverpool, said he proposed to refer to the particular requirements of accommodation, the restrictions in connection with the site, and to illustrate some of the stages in the gradual evolution of the finished design and its subsequent translation into actual building.

The site is situated at the top of Water Street, the principal thoroughfare leading up from the river, and on its east side overlooks the charming Town Hall designed in 1784 by John Wood of Bath, and the Exchange Flags. The streets on the remaining two sides are rather narrow and are occupied by nineteenth century buildings.

Owing to restrictions in the height of the building and consideration of its surroundings and other factors, it was necessary for small scale plans of all possible alternative arrangements to be made before the scheme eventually decided on was proved to be the most suitable and most economical building. Mr. Rowse showed on the screen sketches made at very early stages which illustrated the gradual evolution of the scheme submitted and showed how he had aimed at providing a Banking Hall of as large an area as possible unrestricted by vertical supports, carrying the walls of the Lighting Court above on the ends of cantilevers extending beyond the point supports in the connecting arcades. The lecturer illustrated his remarks on the construction, plumbing, heating and lighting details with slides, working drawings and isometric sketches.

Speaking of the decorative treatment, Mr. Rowse said that to maintain unity throughout, he had arranged for all the modelling for enrichments in stone, fibrous plaster or ornamental metalwork to be carried out by one sculptor, and the illustrations showed how the same character was expressed in all the ornament. In conclusion, slides were shown of a completed rotunda containing some very beautiful bronze grilles and a coloured marble mosaic floor of striking design, also of the bronze doors to the main entrance and their richly modelled surround.

#### HAMPSHIRE AND ISLE OF WIGHT ARCHITECTURAL ASSOCIATION

On 15 January Professor A. E. Richardson, F.S.A. [F.] gave a lecture to members of the Association and the General Public on "Country Buildings" in the Guildhall, Winchester. The President, Mr. Ingaltor Sanders [F.] was in the chair, and all the arrangements had been made by the Hon. Secretary, Mr. A. L. Roberts [F.]

Professor Richardson, who illustrated his lecture with slides, said that everything worth saying about architecture had been said time and again, with the exception of the statement that it was a pity that the term had ever been invented—it was nothing more than a label of which some people had become so desperately tired that they pre-

ferred such terms as "expressionism" or "functionalism" to the more sophisticated word "building."

In an interesting historical survey of the nineteenth century, the lecturer said that 30 years ago many towns were still part of the countryside, and that 50 years ago the country began less than four miles from Charing Cross. The danger was the complete urbanisation of the land. Following a reference to the root causes of the present unrest, he said, "The threat of to-day is that of a town population rushing outwards to squat on land which, rightly speaking, should be under the plough. . . . This is an age of transition . . . violent and dynamic change from snug prosperity to conditions that call for serious thought . . . what is needed is immediate adjustment of industrial activity, and this vital alteration should come from beyond the boundaries of cities. . . . We have, therefore, as Englishmen, to examine the avenues by which rural prosperity can be easily and rapidly regained; and once these are mapped out, we can, as architects, talk of the type of buildings likely to be required."

Professor Richardson spoke of the tremendous agricultural possibilities of England and the rejuvenation of active country life, he foresaw a new communal life in the country favouring small groups of country workers. He urged that country building should be a product of the soil, and that the style should not be dictated from London; that local materials and crafts be used, that furniture for local needs be made in the villages, and that when a new building is projected the landscape be respected.

While Regional Planning may become essential, Professor Richardson thought it a pity to impose a definite plan on natural beauty, and felt that though the art of building must be taught, workers should be allowed more scope in the buildings they are called upon to erect.

Professor Richardson then spoke of how country building might develop; the character of the different kinds of new building, he said, should be inspired by local conditions, on the sure basis of the historical types. "Do not insist," he said, "on rigid lines in country building. . . . It should be your aim not to make buildings look old, nor exact, but it should be your delight to make them look appropriate." There was scope, he added, for the right sort of inventive skill in building, but one should not attempt to transplant workmen's cottages on the Düsseldorf model to rural Hampshire.

Professor Richardson appealed to his audience as country architects to encourage local industries and to modify their professional outlook to meet changing conditions; to increase their knowledge of everything connected with the country, and to leave to their London colleagues the designing of offices, banks and palaces of commerce. In building matters Professor Richardson advised that structure should be put before style, and that economy be practised. "For example," he said, "if a new church is required in a country district, why not build the structure in timber, much after the manner of the fine old barns of Wessex? Do not indulge in crockets, tracery and sham buttresses merely for effect. If you are repairing a church avoid restoration. If the subject is a farmhouse, a group of cottages or a village inn, avoid the old looking just as you should eschew the modern looking! Economy of idea, economy of material, good sense, due regard for permanency and simplicity of upkeep, these attributes of building will make your work famous. Above all things, avoid the evil influences of cities and suburbs and the fashions which are made popular by photography."

In this interesting age, Professor Richardson continued, we view the pageantry of the past as something unattainable, we have comfort, luxury and a great measure of freedom; in art we favour imitation rather than emulation; hare-brained originality is pursued and distortion and ugliness in art receives praise. Because this is so throughout the world, "Let England to herself be true," he said. "I do not deny the value of competitive force. Adventure in building, if it is logical, is a healthy sign; but you will agree that building is not a matter of styles or veneers of fashionable design." It was his aim, he said in conclusion, to outline part of the national policy at present under Parliamentary discussion. "We want scope for our activities, commissions to build and room to express ourselves and increase our clientele. Such opportunities as we desire are not likely to accrue from chance: they will arise when new communal interests spring up at the call of earnest and devoted men. The task before your Society, gentlemen, is to encourage local industry and to work

with your fellows in restoring the well-being and activity to rural England."

A vote of thanks to Professor Richardson was proposed by Professor R. M. Y. Gleadowe, Slade Professor of Fine Art at Oxford.

THE ESSEX, CAMBRIDGE AND HERTFORDSHIRE SOCIETY OF ARCHITECTS  
WEST ESSEX CHAPTER

The West Essex Chapter celebrated its birthday on Tuesday, 9 February, when a most interesting programme took place consisting of an informal dinner, an inspection of the new Saville Theatre, Shaftesbury Avenue, W.C., and attendance at the play.

A reception was held at the Lysbeth Hall, Soho, by the Chairman, Mr. T. H. B. Scott, F.R.I.B.A., and Mrs. Scott, and nearly 70 members and visitors sat down to dinner.

Mr. S. Phillips Dales [F.], President of the Society, proposed the toast of the West Essex Chapter and the Chairman, Mr. T. H. B. Scott, to which Mr. Scott responded.

The toast of the visitors was proposed by the Honorary Secretary, Mr. Arthur C. Russell [L.], and replied to by Mr. T. P. Bennett, F.R.I.B.A., Architect to the Saville Theatre, who briefly described the design, construction, heating and ventilation and decoration of the theatre.

The party then adjourned to the Saville Theatre, where by the kindness of the directors and the courtesy of the general manager, Mr. Alfred Turner, they were personally conducted over the theatre by Mr. T. P. Bennett. One of the most striking innovations of the planning was the construction of a salon under the stalls, specially designed for the use of ladies as a rest room. The very fine mural decorations and wall paintings executed by Mr. A. R. Thompson were generally admired.

A souvenir of photographs and drawings of the various parts of the theatre was given to each visitor by Mr. Hugh Martin-Kaye, Editor of *Architecture Illustrated*.

Attendance at the performance of the musical play, "For the Love of Mike," brought a very pleasant evening to a close.

## Notices

### THE TENTH GENERAL MEETING

The Tenth General Meeting of the Session 1931-32 will be held on Monday, 21 March 1932, at 8 p.m., for the following purposes:—

To read the Minutes of the Ninth General Meeting held on Monday 7 March 1932; formally to admit members attending for the first time since their election.

To read the following Paper: "A Layman's Thoughts on Architecture," by Professor J. W. Mackail, M.A., LL.D., F.B.A. [Hon. A.].

### SPECIAL GENERAL MEETING

A Special General Meeting will be held on Monday, 21 March 1932, at the conclusion of the above General Meeting for the following purposes:—

1. To consider the Council's proposal to amend the Declarations to be signed by Fellows, Associates, Honorary Associates and Licentiates, referred to in Bye-law 23 as Declarations A., B., C. and D., as follows:—

#### A. FELLOWS

After the word "do" on line 2, delete the words "in consideration of my having been so elected," and insert the word "hereby."

#### B. ASSOCIATES

Delete all the words between "undersigned" on line 1 and "promise" on line 5 and insert the words:

"being engaged in the study (or practice) of Architecture, having attained the age of twenty-one years, and having

been elected an Associate of the Royal Institute of British Architects, do hereby."

#### C. HONORARY ASSOCIATES

Delete all the words between "undersigned" on line 1 and "promise" on line 6 and insert the words:

"being interested in the study of Architecture but not following the profession of an Architect, and having been elected an Honorary Associate of the Royal Institute of British Architects, do hereby."

#### D. LICENTIATES

Delete all the words between "undersigned" on line 1 and "promise" on line 5 and insert the words:

"being engaged in the study (or practice) of Architecture, having attained the age of thirty years and having been elected a Licentiate of the Royal Institute of British Architects, do hereby."

2. If the amendments are approved, to pass the following resolution:—

That the Declarations A., B., C. and D. referred to in Bye-law 23 be amended in the manner shown above and that the necessary steps be taken to obtain the sanction of the Privy Council to such amendments as is required to give effect to this resolution.

### R.I.B.A. ANNUAL DINNER 1932

The Annual Dinner will take place on Friday, 8 April 1932, at Claridge's Hotel, Brook Street, W.1. Full particulars are contained in the circular letter enclosed with this issue of the JOURNAL.

### THE ARCHITECTS' CONFERENCE, MANCHESTER

15-18 JUNE 1932

The Annual Conference of the Royal Institute of British Architects and its Allied and Associated Societies will take place at Manchester from 15 to 18 June 1932. The Manchester Society of Architects have in hand the preparation of a most attractive programme, and particulars will be issued in due course.

All members and students of the R.I.B.A. and all members of the Allied Societies, the Architectural Association, and the Association of Architects, Surveyors and Technical Assistants, are cordially invited to attend the Conference.

It is expected that there will be a large attendance of members from all parts of the country, and they are urgently requested to arrange for their hotel accommodation at the earliest possible dates so as to avoid the risk of disappointment. When communicating with Manchester hotels, please mention R.I.B.A. Conference, as a number of rooms have been specially reserved for members. Reservations can be effected through Messrs. Thos. Cook and Son, Ltd.

The Executive Committee of the Conference have kindly furnished the following list of hotels, with charges:—

	Bed and Breakfast per day.	Full Board.
Midland Hotel	15/- to 24/6	27/6 to 37/-*
Queen's Hotel	14/6	21/-*
Grand Hotel	10/6 to 13/6	17/6 to 22/-
Victoria Hotel	11/-	19/6
Grosvenor Hotel	10/6	17/-
Deansgate Hotel	10/-	15/-†

\*Including afternoon tea. †[Breakfast, lunch and high tea. Table d'hôte dinner not served.]

## OVERSEAS APPOINTMENTS

Members contemplating applying for appointments overseas are recommended to communicate with the Secretary R.I.B.A., who will supply them with any available information respecting conditions of employment, cost of living, climatic conditions, etc.

## Competitions

## R.I.B.A. NEW PREMISES

The R.I.B.A. invite architects, being Members or Students of the R.I.B.A., or of the Allied and associated Societies, to submit, in competition, designs for new premises and headquarters to be erected on a site in Portland Place and Weymouth Street, London, W.1.

## Jury of Assessors:—

Mr. Robert Atkinson [F.].  
Mr. Charles Holden [F.].  
Mr. H. V. Lanchester [F.].  
Sir Giles Gilbert Scott, R.A. [F.].  
Dr. Percy S. Worthington, F.S.A. [F.].

Premiums: £500 and a further £750 to be awarded according to merit.

Last day for receiving designs: 31 March 1932.

Conditions of the competition and answers to questions have been circulated to Members, or may be obtained on application to the Secretary R.I.B.A., 9 Conduit Street, London, W.1.

## WALTHAMSTOW: TOWN HALL AND MUNICIPAL BUILDINGS

The Corporation of the Borough of Walthamstow invite architects to submit, in open competition, designs for a new Town Hall and Municipal Buildings.

Assessor: Mr. H. Austen Hall [F.].

Premiums: £500, £300, £200 and £100.

Last day for receiving designs: 31 March 1932.

Last day for questions: 30 September 1931.

## Members' Column

## CHANGE OF ADDRESS

AFTER 8 March, Mr. C. McArthur Butler's [L.] address will be 13 Taviton Street, W.C.1.

## FLAT TO LET

MEMBER offers to let his fully furnished flat in the N.W.6 district for about three months from mid-April. Four rooms and small drawing office with boards, etc., typewriter, telephone. 15 minutes to Piccadilly Circus. Rent, £3 3s. per week. Apply Box No. 2522, c/o Secretary R.I.B.A.

## ACCOMMODATION TO LET

Two large and one smaller good light rooms on First Floor to let to Architect (Victoria district). Inclusive rental £130 or near. Write Box No. 2622, c/o The Secretary R.I.B.A.

SMALL unfurnished office to be let. Bedford Row district. Share of telephone and housekeeping can be arranged. Modest rental. Write Box No. 2322, c/o Secretary R.I.B.A.

## PARTNERSHIPS REQUIRED

MEMBER with wide experience in all classes of work, including successful results in open competitions, energetic and reliable, requires a partnership in a new or established firm, either home or overseas. Proposition must be sound. Highest references. Apply Box No. 2422, c/o Secretary R.I.B.A.

A.R.I.B.A. 16 years' experience and some capital desires partnership or position of trust. Good references and qualifications. Apply to Box No. 1332, c/o The Secretary R.I.B.A.

## PRACTICE WANTED.

MEMBER desires to purchase established practice in any county. Must bear investigation. Capital available. Replies treated in strict confidence. Box No. 1522, c/o Secretary R.I.B.A.

## NEW PARTNERSHIP

MR. PHILIP R. CLARIDGE [F.] is now practising in association with Mr. L. Gregory Bruer [A.] and Mr. Norman C. Fisher [A.], at Claridge House, Gawler Place, Adelaide, South Australia.

## A.B.S. INSURANCE DEPARTMENT.

## HOUSE PURCHASE SCHEME

(for property in Great Britain only).

*Further Privileges now Available.*

The Society is able, through the services of a leading Assurance Office, to assist an Architect (or his client) in securing the capital for the purchase of a house for his own occupation, on the following terms:—

## AMOUNT OF LOAN.

Property value exceeding £666, but not exceeding £2,500, 75 per cent. of the value.

Property value exceeding £2,500, but not exceeding £4,500, 66½ per cent. of the value.

The value of the property is that certified by the Surveyor employed by the Office.

N.B.—Legal costs and survey fees, and, in certain cases, the amount of the first quarter's premium payment will be advanced in addition to the normal loan.

## RATE OF INTEREST.

In respect of loans not exceeding £2,000 5½ per cent. gross.

" " in excess of " 5½ " "

## REPAYMENT.

By means of an Endowment Assurance which discharges the loan at the end of 15 or 20 years, or at the *earlier death* of the borrower.

## SPECIAL CONCESSION TO ARCHITECTS.

In the case of houses in course of erection, it has been arranged that, provided the Plan and Specification have been approved by the Surveyor acting for the Office, and the amount of the loan agreed upon, and subject to the house being completed in accordance therewith, ONE HALF of the loan will be advanced on a certificate from the Office's Surveyor that the walls of the house are erected and the roof on and covered in.

NOTE.—Since 1928, over £50,000 has been loaned to architects under this scheme, and as a result over £600 has been handed to the Benevolent Society.

If a quotation is required, kindly send details of your age next birthday, approximate value of house and its exact situation, to the Secretary, A.B.S. Insurance Department, 9 Conduit Street, London, W.

## R.I.B.A. JOURNAL.

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